

Contents

Acquisitions	2
Autodesk Completes Acquisition of Blue Ridge Numerics, Inc.	2
OpenText Accelerates Mobile App Strategy with weComm Acquisition Agreement	3
CIMdata News	4
The PLM Economy Blog: "Excuse me, is this seat taken?"	4
Company News	4
Autodesk Names IMAGINiT Technologies Reseller of the Quarter	4
AVEVA Launches New Operations Integrity Management Paper	5
Cabinet NG Achieves Gold Independent Software Vendor Accreditation in New Microsoft Partner Network	5
Fishbowl Solutions Announces European Expansion	6
Focus PLM of Italy Joins Aras Partner Program	6
Hard Dollar Expands Project Cost Management with Terillium Inc.	7
Informative Graphics Putting Strong Focus on Microsoft SharePoint Development, Expertise and Leadership	7
Surfware Appoints JBH Technologies, Inc. as Educational VAR in Illinois	8
Visual 2000 Appoints Fashion Veteran Tony Walker as European Sales Director	8
Events News	9
Apache Design Solutions to Host Technical Workshop Series at DATE 2011	9
Delcam to Host MTA/UKTI Export Seminars on China and Russia	10
Delcam to Launch Complete "Open Implantology" Dental System at IDS	10
Delcam to Show CAD/CAM Latest at Composites Manufacturing	11
Familiarize with KOMPAS-3D at Hannover Messe in Hall 17 Stand G68	12
Get Complimentary On-demand CATIA V5 Training with your COE Conference Registration	13
Graphic Products North America Inc. (Windsor, Ontario) Announces Release of CAM-TOOL Version 7.1 at Amerimold 2011 Booth 658	13
HiQube and NCMS Host Technology Webinar for Plant Managers to Improve Operational Efficiency	14
iBASEt Demonstrates CAD, PLM and MES Integration at AeroDef	15
Si2 Sponsors the 12th International Symposium on Quality Electronic Design	16
3 Critical Tips for PLM PDM CAD Migration Planning and Execution - PROSTEP Webinar for Siemens - Dassault - PTC and More	16
VISTAGY Highlights Industry-Specific Approach to Composites Engineering Solutions at JEC 2011	17
Financial News	18
Catalog Data Solutions Announces 26% Growth Driven by Industrial Suppliers Adapting to the New Buying Process	18
Planisware Enjoys Continued Growth and Success in 2010	19
SpaceClaim Continues Rapid Global Growth and Market Expansion in 2010	20
Implementation Investments	21
Cleaner Energy, Fluid Processes: Viessmann Selects Siemens PLM Software Technology to Enhance Efficiency and Productivity	21
IFS signs MRO provider Alitalia Maintenance Systems S.p.A.	22
Mentor Graphics Helps CamSemi Replace Design and Verification Flow to Improve Simulation Performance and Time to Market	23

CIMdata PLM Industry Summary

Pharmaceutical Enterprise TOLMAR Selects Pilgrim Software's Integrated Quality & Compliance Solutions	23
Radan Customer Case Study: Wired DNC Bites the Dust	24
Shengli Engineering and Consulting Company Limited Selects Intergraph® SmartPlant® Enterprise Solutions	25
Yokogawa Achieves 5X Faster Programmable Logic Controller Performance With Synopsys' Processor Designer	26
Product News	26
Advanced Magnet Lab Becomes COMSOL Certified Consultant	26
Agilent Technologies' Latest GoldenGate RFIC Simulation Software Raises the Bar on Performance and Usability	27
CCE's EnSuite Enhanced with Tools for Reverse Engineering & Rapid Prototyping	29
Coventor SEMulator3D Software Reduces Cost and Development Cycles for Semiconductor and MEMS Processes	29
Dassault Systèmes' DraftSight Now Available for Linux	31
EPM Live Launches WorkEngine's Enterprise Portfolio Management Capabilities for SharePoint	32
Feature-Packed LMS Virtual.Lab Rev 10 Puts Speed and Productivity Center Stage	34
Fujitsu Releases New Virtual Product Simulator with Assembly Process Verification	34
Introducing DARS v2.06: Advanced Chemistry Simulation for Efficient & Green Engineering	36
Lectra Leads the Leather Cutting Solutions Market with Leather Suite V3R1	38
LMS International and e-Xstream Partner on Composite Fatigue Analysis and Composite Simulation	39
Mentor Graphics Announces Logic and Physical Synthesis Support for Xilinx 7 Series FPGAs	40
Mentor Graphics Introduces Calibre RealTime for Instant Signoff Verification of Custom IC Designs	41
MSC Software Reseller Develops Productivity Tools for Compute Intensive Nonlinear Simulations using MSC Marc	42
New TurboCAD Pro 18 Significant Performance and Feature Additions	43
Siemens PLM Software's Parasolid and D-Cubed Components Power New Product from IronCAD	45
Springsoft, Dongbu HiTek Release First in Series of Laker Process Design Kits to Streamline Custom Chip Design	46
Synopsys Announces FPGA Synthesis Support for Xilinx's Newest ISE Design Suite 13	46

Acquisitions

Autodesk Completes Acquisition of Blue Ridge Numerics, Inc.

10 March 2011

Autodesk, Inc. announced that it has completed the acquisition of Blue Ridge Numerics, Inc., a leading simulation software provider, for approximately \$39 million in cash, subject to a working capital adjustment. Autodesk announced its intent to purchase Blue Ridge Numerics on Feb. 17, 2011.

The addition of Blue Ridge Numerics' CFdesign software will enhance the Autodesk solution for Digital Prototyping with powerful thermal and fluid flow simulation capabilities, enabling mechanical and building system engineers to virtually test and predict real-world behavior of designs and eliminate expensive physical prototyping cycles in the lab.

"Simulation is critical for product or building system designers to be successful and to compete more effectively," said Robert "Buzz" Kross, senior vice president, Manufacturing Industry Group at Autodesk. "Autodesk customers can now better understand the impact of fluid flow and heat transfer on their designs before they are built, helping to improve quality and drive profitability."

Business Outlook

This transaction is expected to have no impact on guidance issued on Feb. 24, 2011.

 [Click here to return to Contents](#)

OpenText Accelerates Mobile App Strategy with weComm Acquisition Agreement

8 March 2011

OpenText™ announced has reached an agreement to acquire London-based weComm. weComm's technology will facilitate OpenText delivering a strategic platform to companies which will help them provide rich, immersive mobile apps cost-effectively across the multitude of mobile operating systems and devices to reach their customers, consumers or partners.

"As mobile devices are changing the consumer landscape, more enterprise customers are moving to mobile apps to reach everyone from customers to employees," said Eugene Roman, Chief Technology Officer at OpenText. "This advanced technology allows our customers to rapidly deliver highly functional apps on all types of devices economically, giving them an enormous edge over their competitors both in efficiency and time to market." According to Roman, weComm will enable OpenText to accelerate the mobility strategy it launched in 2010 with the introduction of OpenText Everywhere.

Founded in 1999 and serving major customers today, weComm is a pioneer of the mobile application industry. The company's software platform offers fast, low-cost deployment of high-quality, media rich applications for all leading mobile devices, including smartphones and tablets -- iPhone, iPad, Android, Blackberry, Windows Mobile, Symbian, Java -- more than 900 devices in all.

Because weComm's WAVE platform is technology agnostic, it helps solve the biggest problem corporate customers, government organizations and app creators have today: The dilemma of whether to select a single platform for app delivery or to incur the high cost of porting, deploying, updating and maintaining apps across the entire landscape of devices. Without such technology, inclusivity comes at a very high price in the mobile app world.

"weComm's device-independent platform adds real value over the other options our enterprise customers have today," said Roman. "weComm offers exciting leading-edge technology and a great new opportunity for OpenText. It's a logical fit for our major brand-name customers, in banking, retail, media and entertainment and other markets no matter what type of content application they use."

Adding a platform for mobile apps gives OpenText a full array of capabilities to meet the evolving needs of enterprise CMOs. The next iteration of Web experience management systems requires mobile content creation, development and delivery. The combination of its existing customer engagement offerings and the weComm WAVE platform puts OpenText in pole position, ahead of other Enterprise Content Management vendors in the battle for the Mobile Enterprise Application Platform market.

weComm also strengthens OpenText Everywhere's position in mobile ECM by providing enterprises with the ability to create, deliver, and maintain mobile applications to their employees for all mobile operating systems. OpenText Everywhere provides pre-packaged mobile applications for the OpenText ECM Suite focused on collaboration, document management and workflows. With weComm, OpenText can also offer mobile applications and solutions in a compliance-based environment, requiring security and policy controls as well as develop and deliver content based mobile applications that may be consumed by anyone.

CIMdata PLM Industry Summary

weComm, OpenText Agreement

Details of the transaction were not disclosed. The transaction is expected to close this quarter, subject to customary closing conditions. The acquisition does not bring significant pre-existing revenues or profit. Details will be disclosed in the OpenText next regular quarterly release.

For more information on OpenText Everywhere, go to: [OpenText Everywhere](#).

For more information about weComm, go to <http://www.weComm.com20>

Follow OpenText on Twitter [@opentext](#).

 [Click here to return to Contents](#)

CIMdata News

The PLM Economy Blog: “Excuse me, is this seat taken?”

March 2011

Over the last several months, we have been asked by several players in the PLM economy about “seat counts” for various PLM solutions. This information is generally not published and is almost always confusing. The definition of a “seat” has as many variations as the ones creating the estimate or asking the question. Read our [blog](#) to learn more and comment.

 [Click here to return to Contents](#)

Company News

Autodesk Names IMAGINiT Technologies Reseller of the Quarter

9 March 2011

Autodesk, Inc. has named [IMAGINiT Technologies](#) the North American Reseller of the Quarter for the fourth quarter of Autodesk’s 2011 fiscal year. IMAGINiT was selected from more than 200 North American resellers for its significant growth and exceeding targets across industry-specific markets that include architecture, engineering, construction, manufacturing and design visualization. As part of a newly developed IMAGINiT Q4 Subscription program, the company encouraged customers to take advantage of multi-year subscriptions through aligned compensation changes.

IMAGINiT Technologies is one of the world’s largest providers of enterprise solutions to the engineering community, as well as being one of the largest North American [Autodesk Authorized Training Center \(ATC\)](#) sites. With over 20 years of experience, and more than 40 offices throughout North America and Asia Pacific, the company provides expertise, training and support needed to help companies increase productivity, maximize their investment in design engineering software tools and gain competitive advantage in the marketplace.

Autodesk selects the Reseller of the Quarter based on quality of customer service, support and professional education, overall growth and vertical sales.

 [Click here to return to Contents](#)

CIMdata PLM Industry Summary

AVEVA Launches New Operations Integrity Management Paper

8 March 2011

AVEVA announced the publication of a comprehensive Operations Integrity Management (OIM) strategy for Owner Operators in the oil & gas industry. Exploring critical business areas for both project and asset performance, the business strategy paper seeks to identify how Owner Operators can reduce operational cost and risk through an optimised information management strategy.

At the centre of the OIM strategy is the Digital Information Hub, a secure store of information and its associated relationships, allowing users to search, modify, control and collaborate across major capital projects and throughout the long-term operation of their assets.

The supervision of major capital projects, complex handover operations, maintenance, engineering and regulatory compliance all demand structured information integrity. Poor information leads to poor decisions with potentially catastrophic consequences. AVEVA's OIM strategy allows Owner Operators to control the quality and accessibility of critical project and operational information, increasing productivity and profitability while reducing operational risk.

The new OIM paper focuses on business areas identified as critical to success for Owner Operators. For the domain of Project Performance, focus is provided on improving Project Controls and the Commissioning & Handover process. In the operations phase where Asset Performance is key, focus is provided on improving Operations Readiness, In-Plant Engineering, Operations and Maintenance and HSE & Regulatory Compliance.

"AVEVA has been providing 3D design and engineering solutions to Owner Operators and Engineering Contractors for over 40 years. Our OIM strategy builds on this extensive experience by providing a very flexible approach to complex information management requirements. With a focus on managing the Digital Asset and an open approach the Digital Information Hub allows Owner Operators to control and share information from AVEVA applications, as well as, from other vendors. We believe that customers must be able to choose the applications that address their business requirements and that AVEVA's open OIM strategy is uniquely positioned to help Owner Operators, unlock the full potential of their engineering and business information," said Simon Bennett, Product Strategy Manager, Enterprise Solutions at AVEVA.

To read the business paper please visit <http://www.aveva.com/whitepapers>.

 [Click here to return to Contents](#)

Cabinet NG Achieves Gold Independent Software Vendor Accreditation in New Microsoft Partner Network

7 March 2011

Cabinet NG (CNG), provider of [document management](#) and [workflow management](#) software, announced it has been awarded the highest level of Microsoft Partner Network accreditation - the Gold Independent Software Vendor (ISV) Competency - because of its expertise and impact in the technology marketplace as a producer of document management software. Having attained this competency, CNG has demonstrated expertise with Microsoft technologies and an ability to meet customers' needs. As a member of the Microsoft Partner Network, CNG can take advantage of benefits specifically tailored to its competency in its ongoing product development processes.

CIMdata PLM Industry Summary

CNG's document management software moves manual paper-based processes into efficient [electronic](#) workflows to help industry verticals attain a [paperless](#) office that scales with business growth. Its intuitive, secure and affordable filing approach supports interdepartmental collaboration, allowing users across the company to accomplish tasks more efficiently with centrally managed and instantly accessible documents. Advanced integration technology ensures smooth workflow and connection to many existing Windows or Web-based business applications. CNG's document management products can be installed locally or online in a hosted SaaS configuration.

Microsoft Competencies are designed to help differentiate a partner's capabilities with specific Microsoft technologies to customers looking for a particular type of solution. Each competency has a unique set of requirements and benefits, formulated to accurately represent the specific skills and services that partners bring to the technology industry. As one of the requirements for attaining the Gold ISV/Software competency, CNG had to demonstrate greater value to its customers by showcasing best-in-class solutions that have been subject to a rigorous and auditable approval process and testing requirements. Members of the Microsoft Partner Network that have obtained this competency have a successful record of developing and marketing software based on Microsoft technologies.

 [Click here to return to Contents](#)

Fishbowl Solutions Announces European Expansion

8 March 2011

News Facts

Fishbowl Solutions, a consulting services and software development company specializing in solutions for Oracle's Enterprise Content Management and WebCenter products, has announced their intention to expand to Europe, extending their product and services offerings to Oracle customers in those countries.

As a kick off to their European expansion plans, Fishbowl will be participating in the Oracle Service Oriented Architecture (SOA) and Enterprise 2.0 Partner Community Forum on March 15th and 16th in Utrecht, The Netherlands. This event brings together Oracle SOA, Business Process Management, and Enterprise 2.0 product managers and partners to strategize, exchange knowledge and learn from successful implementations.

Supporting Resources

- [Fishbowl Solutions Website](#)
- [Fishbowl Solutions for Oracle Enterprise Content Management](#)

 [Click here to return to Contents](#)

Focus PLM of Italy Joins Aras Partner Program

10 March 2011

Aras® announced that Focus PLM, a consulting services provider located in the Bologna region of Italy, has joined the Aras Partner Program.

Focus PLM helps manufacturing companies improve the performance of product development and product-related processes across the lifecycle. Focus PLM's experienced personnel provide consulting services for PLM solution deployment, systems integration and process improvement to companies

CIMdata PLM Industry Summary

across the region.

“Focus PLM has extensive, hands-on experience in PLM implementation and a commitment to customer service and support. We are pleased to have them in the Aras Partner Program and we welcome them to the Aras Community,” said Peter Schroer, President of Aras.

 [Click here to return to Contents](#)

Hard Dollar Expands Project Cost Management with Terillium Inc.

8 March 2011

[HardDollar.com](#), a leading provider of [Project Cost Management](#) solutions, announced a reseller agreement with the Certified Oracle Solutions partner, Terillium Inc. As part of the HD Authorized Reseller Partner (HARP) program, the alliance allows Terillium to resell HD products and services to leading project professionals worldwide.

This joint effort combines Terillium expertise in JD Edwards, E-Business Suite and Primavera with the strengths of HD Project Cost Management, which integrates with those solutions.

After a 34% partner channel growth in 2010, Hard Dollar selected Terillium as a strategic partner to continue the expansion of Project Cost Management in the global market, providing a diverse customer base with improved costs and productivity on every project.

“Terillium is a true leader in offering their customers the ability to tie Scope, Schedule, and cost all together into one integrated solution,” said Jeffrey Nesbitt, Director of Global Channel Sales. “We’ve joined forces to provide the cost-effectiveness, accuracy and flexibility required to guarantee owners and contractors with a strong project experience.”

Commenting on the recent partnership Matt Lesseuer, Terillium Vice President of Sales said, “Here at Terillium, we are extremely excited about our partnership with Hard Dollar and the ability to offer our clients improved Estimating and Project controls Solutions that seamlessly integrate into our current offerings.”

About Terillium Inc.

[Terillium](#) is a Certified Oracle Solutions partner, specializing in reselling and implementing Oracle software across many industries, enabling companies to develop a competitive edge by utilizing technology and process improvements.

 [Click here to return to Contents](#)

Informative Graphics Putting Strong Focus on Microsoft SharePoint Development, Expertise and Leadership

8 March 2011

Informative Graphics Corporation (IGC) announced the addition of two experienced Microsoft® professionals to lead the company’s SharePoint® initiatives. This is part of IGC’s dedication to bringing quality, innovative solutions to SharePoint users.

In the past year, IGC invested significant time and energy in integrating its flagship product, Brava®, with SharePoint 2010. In fact, IGC first demonstrated this integration in May 2010 at the SharePoint 2010 launch events, with the official product launch in October 2010. IGC has additional product

CIMdata PLM Industry Summary

launches planned in the coming months which will accelerate its traction within the SharePoint community.

To that end, IGC sought team leaders with prior experience at Microsoft to ensure continued alignment with Microsoft strategies, and to help create the best possible products for our mutual customers.

Deidra Jow joined IGC in January as Product Marketing Manager for SharePoint. She brings 17 years of experience as a marketing manager at Microsoft.

Doug Skinner joined IGC in February as Director of Business Development for SharePoint-focused Products. He was previously in sales at Microsoft, responsible for organizing Microsoft professional services partners to deliver software solutions in the US.

IGC Director of Marketing Christine Musil comments, "Microsoft SharePoint has been a huge success and we are very excited about the opportunities it affords IGC for innovative new software development. IGC has long enjoyed strong partnerships with leading ECM vendors like EMC, OpenText and IBM, and we believe we can leverage our experience gained in serving those ECM customers to the service the growing number of Microsoft SharePoint customers. We are also very proud to welcome Deidra and Doug to the IGC team, and are confident their first-hand knowledge of Microsoft will benefit our developers and customers alike."

 [Click here to return to Contents](#)

Surfware Appoints JBH Technologies, Inc. as Educational VAR in Illinois

10 March 2011

Surfware, Inc. announced the appointment of JBH Technologies, Inc. as an Educational VAR in Glenview Illinois. JBH will be licensing and supporting educational SURFCAM CAD/CAM Systems.

"We are very pleased to be able to represent SURFCAM's CAD/CAM Systems," says John Heitman, President of JBH. "SURFCAM is going to bring great value to the solutions we will now be able to offer to our new and existing customers. Everyone at JBH is looking forward to now be able to offer a world-class CAM system as part of our manufacturing solutions offerings."

"We are excited to add another partner to our North American network of Educational Value Added Resellers," says Peter Marton, Vice President of Surfware. "SURFCAM's continual growth in the marketplace requires capable and professional personnel to support our expansion into the educational market. We are also pleased here at Surfware to have JBH on board to license and support educational facilities that require world class precision, control, and ease-of-use from their CAM system."

SURFCAM products have been installed on more than 25,000 systems worldwide over the past 20 years. In that time, SURFCAM has grown to support 16 languages and has gained outstanding reputation for training and providing the highest level of technical support to its customer base. SURFCAM continues to be one of the most affordable CAD/CAM software solutions to the CNC machining market today to end-users around the globe.

 [Click here to return to Contents](#)

Visual 2000 Appoints Fashion Veteran Tony Walker as European Sales Director

9 March 2011

CIMdata PLM Industry Summary

[Visual 2000 International Inc.](#) has named Tony Walker to the newly created position of European Sales Director. Mr. Walker brings more than twenty years of experience in the fashion industry; including retail store management, manufacturing management, and PLM project and account management the post. From his UK base, Walker will market and sell the company's comprehensive range of product lifecycle management (PLM), enterprise resource planning (ERP), business intelligence (BI), and other End-2-End software solutions across the European fashion industry.

In addition to managing a retail store, Walker owned and operated a specialty sports retail business for more than six years. His manufacturing experience includes materials management and logistics positions for companies supplying merchandise to major UK retailers. Prior to joining Visual 2000, Walker operated a technology consulting business and served in a variety of account and PLM project management roles during his five-year tenure with Gerber Technology.

 [Click here to return to Contents](#)

Events News

Apache Design Solutions to Host Technical Workshop Series at DATE 2011

7 March 2011

Apache Design Solutions announced that it will host two educational Technical Workshops during the upcoming DATE 2011 conference being held at AlpExpo in Grenoble, France. [The Apache Technical Workshops](#) will take place during the conference on **March 15, from 14:00 p.m. to 15:00 p.m., and on March 16, from 12:30 p.m. to 13:30 p.m., in meeting room 7 Laux 4.**

This informative Technical Workshop series will cover two specific topics. The first session on March 15 will focus on “[Chip-Package-System Methodology from Early Stage to Sign-off](#),” featuring the impact of power and noise on overall system cost and performance, and how a proven CPS methodology addresses the power integrity and power induced noise challenges facing today’s engineers. It will detail the modeling, extraction and analysis technologies, as well as efficient model exchange capabilities, required for bringing together SoC, IC package, and system designers to meet their system cost and performance targets.

The second session on March 16 will feature “[Power Methodology for Energy Efficient Designs](#),” highlighting Apache’s broad portfolio of power and noise analysis platforms addressing the needs of low power, energy efficient designs. It will discuss RTL power analysis, reduction and debug, custom IP validation and model creation, and SoC integration, optimization and sign-off, to ensure power budgets are met while maintaining design integrity. This workshop also features advanced reliability challenges, such as ESD and power, signal and thermal integrity needs of 3D IC designs.

Admission to the workshop is complimentary for DATE conference and exhibit attendees, but [advance registration](#) is required and seating is limited.

Learn more about Apache’s products by attending one of these DATE 2011 Technical Paper sessions: “[Ball Grid Array Packages Electrical Optimization Using Apache Package Modeling Tools](#),” presented by Yvon Imbs and Laurent Marechal from STMicroelectronics, on March 16, at 10:30 a.m. in the Exhibition Theatre (Session ET07), or “[System Level Power Integrity Analysis and Supply Network Optimization of a Dual Core CPU](#),” presented by Olivier Bayet from ST-Ericsson, on March 17, at 10:10 a.m. in the Exhibition Theatre (Session ET10).

 [Click here to return to Contents](#)

Delcam to Host MTA/UKTI Export Seminars on China and Russia

8 March 2011

Delcam is to host two overseas market briefings in a series of events to promote exports being organised by MTA in partnership with UKTI under the heading “Go, Export and Survive”. The meetings will both be held at Delcam’s Birmingham headquarters on 6th April, with opportunities in China being covered in the morning and those in Russia being described in the afternoon.

The two sessions, which follow a successful first meeting in the series on the Brazilian market, will be led by Jeremy Gordon and Paul Corcut, UKTI Business Specialists for China and Russia, respectively. Both briefings will give details of business and supply chain opportunities in the countries, provide case studies, and discuss significant infrastructure investments and other major projects. The case studies, to be presented by businesses that are already successful exporters, will provide practical advice, examples and guidance in approaching these overseas markets.

Both events will provide the opportunity to meet the UKTI business specialists face-to-face, and ask specific questions about the Chinese and Russian markets, so helping to raise delegates’ awareness on trade opportunities and how to exploit them.

For further information on the meetings and to register, please contact ChristelMoustacas at the MTA via email, cmoustacas@mta.org.uk or by phone, 020 7298 6416.

 [Click here to return to Contents](#)

Delcam to Launch Complete “Open Implantology” Dental System at IDS

7 March 2011

Delcam will launch a complete open system for the design and manufacture of dental implant restorations at the IDS exhibition to be held in Cologne from 22nd to 26th March. Delcam offers a complete solution, from accurately capturing the implant position and orientation, through to the high-precision, multi-axis milling of customised abutments, implant bridges and dental bars, with a management system to track every stage of the process.

This launch is the latest step in the trend within the dental industry to replace “closed” manufacturing methods, in which the user is restricted to the use of a limited range of equipment and materials, with “open” systems, in which manufacturers can combine their own choice of equipment and software, and then use a broad variety of materials.

The key to the Delcam process is a new range of scan adaptors that are compatible with the leading brands of dental implant. Once the scan adaptors have been fitted to the model of the jaw, the scanner can accurately capture the positions and orientations of the implants, together with the shape of the remaining teeth. The precise fit of the scan adaptors, coupled with the latest generation of white-light 3D scanning technology used in the Delcam scanners, ensures the highest possible accuracy in the data collected.

Furthermore, the same manufacturing data that is used to produce the scan adaptors is incorporated into the templates within DentMILL that generate the milling instructions to manufacture the implant interfaces on the restorations. The resulting high accuracy is, of course, important for individual copings

CIMdata PLM Industry Summary

but is absolutely essential for bridges and dental bars that need to align with a number of implants.

This focus on high accuracy has been a key part of Delcam's strategy for the dental industry and has been supported by the panel of experts from among the company's customers that drives the development of the software. The better quality of restorations designed and made with the Delcam software benefits the patient by minimising manual adjustment of the item as it is being fitted, so reducing fitting times, and by offering improved comfort. In the longer term, the resulting restorations are more durable so giving an extended life.

As well as providing the individual components needed for a dental design and manufacturing system, Delcam offers the Dental Manager to manage the entire process. This enables laboratories to track and access all files and transactions from the initial dental scan, through CAD modelling and manufacturing to delivery to the customer.

The laboratory's customers don't need to install any software as the complete system is Internet based. A secure log-in system allows orders to be placed through an order screen that allows customers to identify the required restorations and, based on the prescription, select the material, colour and any extra details.

The Dental Manager then allows laboratory staff to monitor the progress of the order, highlighting any outstanding steps so that the overall workload can be monitored. Customers can be allowed to view the status of their order, and can be notified by email when orders are received and dispatched.

In a similar way, the Dental Manager can be used in milling centres to manage the manufacturing process, from the receipt of the design data, through manufacturing and dispatch.

 [Click here to return to Contents](#)

Delcam to Show CAD/CAM Latest at Composites Manufacturing

10 March 2011

Delcam will show the latest developments in its PowerSHAPE Pro CAD software for modelling of both components and tooling, and PowerMILL CAM system for high-speed and five-axis machining, to the composite industry at Composites Manufacturing 2011, to be held from 12th to 14th April at the Dayton Convention Center in Dayton, Ohio. At the exhibition, Delcam will show how it's advanced manufacturing solutions can help companies to meet the industry's requirements for the highest levels of quality and consistency.

“The changing patterns in materials use, especially in the aerospace industry, offer both threats and opportunities to component manufacturers and the toolmakers that support them,” claimed Brett Hopkins from Delcam Professional Services. “In particular, companies that have been hit by the decline in the North American toolmaking sector could find new opportunities in the composites area. Their skills in producing complex injection moulds could be transferred relatively easily to the manufacture of tooling for compression moulding and reaction injection moulding of composites. Similarly, firms that have traditionally made models and patterns for the metals industry could turn to producing similar items for composites manufacture. Delcam has both the software and services to help companies to make this transition.”

A key element in composite manufacture is in developing the shapes the initial sheet of material should be cut to. To help with this, Delcam's PowerSHAPE has wizards that guide the user step-by-step through the process of 'flattening' a complex 3D shape. The unwrapped pieces can then be modified to

allow for edge overlaps, joints etc., before being nested together to create the optimum cutting pattern.

For 3D modelling of tooling, PowerSHAPE Pro provides a number of alternative methods for constructing a surface from a given set of lines, arcs or points. With Smart Surfacing inside PowerSHAPE, the choice of method to give the best possible surface is made automatically by the software. If the user is unhappy with the automatic selection, or is simply curious to see other options, he can scroll through the alternative solutions. However, perhaps the most impressive thing about Smart Surfacing is that the software's surfacing method is updated automatically as extra information is added to the selection. As any additional lines or points are selected, the chosen surfacing method is reviewed and the surface regenerated if an alternative solution has become more appropriate.

Any set of surfaces can be converted into a finished model with a variety of powerful and reliable filleting and blending commands. The user simply needs to specify the desired fillet radius and the software will show a series of tracks where fillets of that size will fit. Some or all of the possible fillets can then be created with a single command. In PowerSHAPE Pro, even variable-radius fillets and intersecting or overlapping fillets can be created quickly and easily.

The other main focus in the industry has been on improving the production time. Many composite components are still only made to approximate sizes and are then trimmed manually to their final size during assembly. This process is both time-consuming and inaccurate. Delcam believes that composite manufacturers must be able to produce parts to similar levels of accuracy and consistency as suppliers of metal components before the materials can hope to achieve their true market potential, and that the company's range of CAD/CAM software can help meet these objectives.

 [Click here to return to Contents](#)

Familiarize with KOMPAS-3D at Hannover Messe in Hall 17 Stand G68

11 March 2011

KOMPAS-3D from ASCON Group will be presented at Hannover Messe 2011. From 4th till 8th April all the visitors of the event will be able to familiarize and demo features of 3D and 2D modeller, as well as high-tech add-ons of **KOMPAS-3D V12 at ASCON' booth in Hall 17 Stand G68**.

This year the banner of the fair is "Smart Efficiency". KOMPAS-3D will be showcased among others intelligent solutions aimed at cutting costs, optimizing process efficiency and conserving resources at every stage of the production chain. In frame of Digital Factory the software will be presented for designers, engineers, IT experts, editors, journalists, students, representatives of educational institutions and all the interested in powerful and cost-effective MCAD software. KOMPAS-3D V12 is the perfect solutions for people, who don't want to spend more money on the same high-level result. All the functional of KOMPAS-3D for 3D design and KOMPAS-Graphic for 2D solid modelling meet the highest demands of today's high-performance designer and engineer, but at the same time priced more affordable as for the brand-named solutions with the same functions.

Please visit Hall 17 Stand G68 at HM 2011 to acquaint with:

- Showcases and demonstration of software solutions for Mechanical CAD — KOMPAS-3D and KOMPAS-Graphic;
- Tutorials and Trainings of highly qualified CAD experts;
- Functional comparison for KOMPAS-3D vs other CAD solutions;

CIMdata PLM Industry Summary

- FREE Trial Versions of KOMPAS-3D V12 for further familiarization;
- Presentation of ASCON Educational Program;
- Special offers for KOMPAS-3D Professional and Educational License.

Visitors are welcomed to compare KOMPAS functions and cost with their current CAD systems, as well as benefit from special offers for Hannover Messe 2011 at the booth.

For further details or meeting arrangement: contact@ascon.net

 [Click here to return to Contents](#)

Get Complimentary On-demand CATIA V5 Training with your COE Conference Registration

March 2011

Register for the [COE 2011 Annual PLM Conference & TechniFair](#) being held April 3-6 in Orlando Florida and get complimentary, bundled CATIA V5 training courses accessible for the next six months.

Exactly what you get:

The COE 2011 Annual PLM Conference & TechniFair gets you:

- Connected with like user minds in your job role
- High caliber user-driven technical education
- Hands-on training opportunities

[i GET IT](#) provides online self-paced online learning for leading design applications such as CATIA V5. With one full conference registration, you get access to the following courses, available to you for the next six months from point of registration purchase:

- CATIA V5 Assembly Design
- CATIA V5 Intermediate Surfacing

How you do it:

[Register for the conference by March 25 using code TATA](#). After you have registered, you will receive a separate email confirmation with detailed instructions on accessing the complimentary i GET IT courses.

For more information or questions, please contact COE Headquarters at coe@coe.org.

 [Click here to return to Contents](#)

Graphic Products North America Inc. (Windsor, Ontario) Announces Release of [CAM-TOOL Version 7.1](#) at Amerimold 2011 Booth 658

11 March 2011

Graphic Products North America Inc. (Windsor, Ontario) will soon be releasing the latest version of its Elite CAD/CAM Software CAM-TOOL Version 7.1.

CAM-TOOL V7.1 is a full version release improving and adding to the Version 6.1 released in June of 2010.

CIMdata PLM Industry Summary

Previously CAM-TOOL was actually a 32 Bit Software and used the 64 Bit capability of the computer to more efficiently Calculate and Optimize Tool Paths. Now in V7.1 a fully supported 64 Bit Version will be available. This will allow a more efficient day to day handling of larger and more complex model files. In addition it will more effectively handle files that include information that was derived from STL.

A New (Optional) Profile has been created that will allow on machine measurement for inspection results before the block is removed from the machine. This is available for Makino users.

In a continuous attempt to maintain a safe and effective Holder and Shank Collision Detection System a "Safety Distance" Option has been added to the Optimization process.

An often requested capability involves the ability to output a continually "Spiraling" Tool Path to be used on certain types of geometry. Z-Level Finish now has a "Spiral" switch that will allow us to create this output. In addition for the 5 Axis Simultaneous users this same Spiral capability will be added to Z-Level Finishing Undercut.

For all of the Polygon Tool Paths there has been a restriction controlling the minimum step over and step down which made to difficult use that very effective Tool Path Set when machining smaller parts using. In V7.1 the restriction has been removed so the users will now be able to use these tool paths in more situations.

With the release of Version 7.1 there are many more changes and improvements too numerous to list here. As usual there will also be some General Improvements and Fixes to known issues that will be described in the HELP Update note.

A note for SolidWorks users: Stay tuned for the upcoming release of CG CAM-TOOL for SolidWorks in the very near future.

GPNA invites anyone with questions to contact them at 519-737-6009 or <http://www.camtool.com>



[Click here to return to Contents](#)

HiQube and NCMS Host Technology Webinar for Plant Managers to Improve Operational Efficiency

7 March 2011

[Altair Engineering, Inc.](#) invites plant management personnel within manufacturing operations to participate in a free webinar discussing how [HiQube](#), a new-generation business intelligence and data analytics technology, can simplify and automate root cause analysis and provide deeper insight into plant performances.

The webinar, co-hosted by Altair and the National Center for Manufacturing Sciences (NCMS), is scheduled for **Thursday, March 10, at 11 a.m. EST**. Manufacturing executives can participate by registering at www.hiqube.com/NCMSwebinar.

For production operations, HiQube enables IT managers, plant managers, finance managers and inventory control management to avoid the time-consuming process of poring over spreadsheets, text files and manual log entries to track down the root causes of equipment downtime, lagging production or quality control issues.

HiQube simplifies root-cause analysis by providing a single, consolidated view of all relevant

CIMdata PLM Industry Summary

information across the enterprise, allowing managers to slice, dice and drill information, as well as to view key performance indicators and conduct what-if analyses, to find the source of production bottlenecks.

NCMS Executive Director, Jon Riley, will make a short introduction to kick-off the webinar and will be followed by Altair's Vice President of Business Intelligence Solutions, Alhad Joshi. With more than 20 years of experience in software development and information management systems, Joshi will share HiQube's approach to enabling a decision support system for plant operations. The discussion will address the aggregation, extraction and transformation of siloed plant data into an advanced multi-dimensional data model – without disrupting business operations or requiring infrastructure upgrades – to provide timely and rapid insight through interactive performance dashboards.

HiQube's technology yields spectacular returns on investment, with payback times of less than six months, while reducing response times by tenfold or better, making the monitoring of factory floor operations quick and efficient.

 [Click here to return to Contents](#)

iBASEt Demonstrates CAD, PLM and MES Integration at AeroDef

10 March 2011

iBASEt will demonstrate the integration between its software suite Solumina and the leading CAD/PLM systems at the AeroDef Exposition and Conference on April 5-7 at the Convention Center in Anaheim, Calif. Specifically, iBASEt will exhibit Solumina's paperless shop floor operations and quality management system with integration to PTC Creo/Windchill and Dassault Systemes CATIA/ENOVIA/3DVIA.

“Now, manufacturers are clamoring to unite MES and PLM,” writes Stephanie Neil, Managing Automation's senior editor, in the article: [“Enterprise Integration Includes PLM and MES.”](#)

The conventional wisdom over the past few years stressed that integrating MES with ERP could dramatically change business for the better. But many observers feel an alignment with engineering and manufacturing is more important to the organization, she added.

Tight information flow between engineering's CAD/PLM systems and manufacturing's MES systems can reduce the time it takes to introduce new products, decrease manufacturing mistakes related to design interpretation, and manage engineering changes more efficiently.

“Solumina fully leverages investments made in 3D CAD systems and streamlines the flow of information between engineering and manufacturing, not just for regulatory compliance, but, to improve efficiency and accelerate product innovation,” Conrad Leiva, VP Product Marketing at iBASEt, said. “We have been providing these integrated solutions through partnerships with leading engineering software vendors.”

For more information, please visit the **iBASEt booth (#1109)**. To schedule a product demonstration at AeroDef, please contact marketing@ibaset.com.

 [Click here to return to Contents](#)

CIMdata PLM Industry Summary

Si2 Sponsors the 12th International Symposium on Quality Electronic Design

9 March 2011

Silicon Integration Initiative (Si2) announced their sponsorship of the 12th International Symposium on Quality Electronic Design (ISQED) which will be held March 14-16 at the Hyatt Regency Hotel in Santa Clara, CA, USA. Si2 will also be participating in the ISQED Exhibit Day on Tuesday, March 15 from 10:00AM to 7:00PM.

The ISQED is the premier Electronic Design conference—bridging the gap between Electronic/Semiconductor ecosystem members providing electronic design tools, integrated circuit technologies, semiconductor technology, packaging, assembly and test to achieve design quality.

This three-day event is packed full of tutorials, keynote speeches, panel discussions, and in-depth technical sessions. The program will also feature the following:

- Full-day information-packed tutorials
- Keynotes by major industry & academia leaders and experts
- Latest trends in electronic design & automation, and semiconductor technologies
- Interact & network with the Experts and industry movers and shakers

To register for ISQED, follow this link: <http://www.isqed.org/English/Conference/Registration.html>

 [Click here to return to Contents](#)

3 Critical Tips for PLM PDM CAD Migration Planning and Execution - PROSTEP Webinar for Siemens - Dassault - PTC and More

March 2011

Webinar Details

The Free PDM Migration Expert Series is designed to give the attendee a head start in planning and executing a large scale PDM migration project with a comprehensive overview of the advantages of various types of migration strategies (Big Bang, Incremental, Hybrid, and Federation). Through real life customer examples and the introduction of standards based technologies, the attendee will gain a firm understanding about the big picture of PDM Migrations. Covered systems include; Dassault (Matrix, Enovia, SmartTeam, VPM), PTC (PRO/I, PDMLink, WindChill), and Siemens (Teamcenter Enterprise, Engineering, UA) and more.

March 17th - Starting at 1pm UTC-5 (EST / NYC)

Part 1: Ready Set Migrate - Substituting PDM Infrastructures (1pm)

Part 2: When to Flip the Switch? - Effective Big Bang Migrations (2pm)

Part 3: Incremental Migrations vs. Integration Solutions & Federation (3pm)

Note that each Webinar Expert Series consist of (3) sessions which occur one after another on the date indicated. If you are not able to attend all 3 sessions (Parts), that is perfectly fine. Just "dial" into the event when you are ready to join. Each Webinar Session starts at the top of the hour, and last for about 45 minutes.

Additional Topics in the PROSTEP Expert Series Webinars

CIMdata PLM Industry Summary

Mar. 17 - PLM / PDM Migration Expert Series

Jun. 23 - 3D PDF Generator - Expert Series

Sep. 22 - PLM / PDM Migration Expert Series

Nov. 12 - Extended Enterprise Collaboration Expert Series

[Register Now!](#) (registration is free)

Supporting Quotes:

"I attended first session and was quite impressed by your experience and knowledge on the subject. thank you" - **Gagen A. (PLM Vendor)**

"The information provided in this Webinar was very instrumental for me especially in the area of Migration and Integration strategies. There was also a lot of value in regards to the information provided on budgeting considerations. Thank you " - **Denise K. (Defense)**

"Very informative. Was a good mix of general migration discussion while showing the capabilities of the tool. the information here would have been good to present to management" - **Steven L. (Space)**

"This was very nice presentation and impressive stuff! ..." - **Anil S. (Aerospace)**

"Very informative - nice flow, and conveyed a lot of good information on a very complex topic in a short amount of time" - **David S. (Defense)**

 [Click here to return to Contents](#)

VISTAGY Highlights Industry-Specific Approach to Composites Engineering Solutions at JEC 2011

8 March 2011

VISTAGY, Inc. announced that it will emphasize the growing role of composites in the automotive market at the [JEC Composites Show](#) from **March 29-31 in Paris, France**. VISTAGY will be exhibiting at **Stand #T45**.

VISTAGY has achieved significant growth in its target industries—automotive, aerospace, wind energy, and marine—because its [FiberSIM®](#) composites engineering software supports the entire design-to-manufacturing process for highly engineered products.

There are many challenges in adopting structural composites for the high volume automotive market, including the need to provide engineers with rapid and accurate structural and crash performance analysis; new design methods suitable for high rate composite manufacturing; tools for selecting and simulating new materials and processes, and cost and weight feedback early in the design process.

FiberSIM answers these challenges with a variety of capabilities, including multi-layer material simulation—a significant factor in automotive composites that provides insight into the drapeability of non-crimp fabrics (NCF) and other new materials—as well as the corresponding manufacturing processes, such as forming.

“With the pressures to improve fuel economy and lower production costs, composites hold great promise for the automotive industry,” said Ed Bernardon, VISTAGY’s vice president of business development. “Our company recognizes the challenges that the automotive industry faces when designing with new materials and processes. We are working with partners within the industry and

CIMdata PLM Industry Summary

investing in the engineering tools needed to exploit the full potential of these materials in high volume commercial vehicles.”

[VISTAGY](#) has developed FiberSIM into the leading composites engineering solution by promoting an open and flexible, best-in-class approach to supporting the entire design-to-manufacturing process. This provides customers with tools that facilitate innovation as well as solutions born from technology partnerships with the top software providers and leading research institutions.

For instance, VISTAGY recently announced several new and enhanced technology partnerships with industry leaders, including Siemens PLM Software, ANSYS, and BETA CAE Systems. It also continues to focus on its research partnerships with prestigious institutions, such as the DLR, the German aerospace center; the University of Dresden; the National Institute of Aeronautical Research, and the University of Massachusetts Amherst.

The VISTAGY stand will feature the new Lotus Renault GP (LRGP) racing car, which was designed with FiberSIM, as well as Ian Goddard, LRGP’s senior CAE engineer who leads the composites design efforts for the company. It will also include demonstrations of FiberSIM 2010.

On March 30th in the Composites Simulation Forum, David Leigh Hudson, VISTAGY’s director of product and market strategy for FiberSIM, will deliver a presentation entitled, “Simulations for Materials and Manufacturing Processes in Composite Intensive Industries.” Attendees will learn how material and manufacturing specific simulations assist with assessing material deformation and degradation and how specific simulation types can assist product development.

 [Click here to return to Contents](#)

Financial News

Catalog Data Solutions Announces 26% Growth Driven by Industrial Suppliers Adapting to the New Buying Process

8 March 2011

Catalog Data Solutions (CDS) announced 26% revenue growth in 2010 compared to 2009.

“Designers now research and select products online so a supplier’s website is their primary marketing vehicle. Our revenue growth proves that an accelerating number of industrial suppliers (manufacturers and distributors) recognize this and are ensuring their parts are easy to find and select on their own website. Adding downloadable CAD aids selection, simplifies incorporation of your product into a new design and leads to a sale once that design goes to market,” said John Major, CEO Catalog Data Solutions. “The pattern we are seeing is that industrial suppliers are:

1. Improving their websites and sales lead generation by rapidly implementing our, relatively low cost, Software as a Service (SaaS) solutions - [CDS Catalog™](#), [CDS ModelServer™](#), [CDS Configurator™](#).
2. Initially or at a later stage, integrating these into existing CRM, ERP, Manufacturing systems, etc by utilizing the extremely flexible and configurable web services architecture of these SaaS solutions.
3. Increasing their online marketing presence by syndicating their CAD content to the [3DModelSpace.com™](#) CAD search engine.

Customers we welcomed last year include three divisions of ITT (Goulds, Bell and Gossett, Marlow), AST Bearings, Amphenol Connex, ISC Engineering, Mueller Industries, GAM, DimcoGray (via

CIMdata PLM Industry Summary

TriComB2B), Kraissl Co. (via Cole WebMarketing), BTM, Associated Spring Raymond, Precision Screw Thread, White Drive Products, Heyco Products, Magnet-Schultz, Altra Warner Linear (via CDS partner i-MARK).

Of all the types of online marketing content a supplier can use (white papers, case studies, brochures, videos, demos, recorded webinars, reviews, CAD model downloads, etc.) only CAD model downloads are known to lead to a sale nearly 50% of the time according to CDS. CAD downloads get a supplier's products specified into new designs, and provide sales leads by registration.

 [Click here to return to Contents](#)

Planisware Enjoys Continued Growth and Success in 2010

4 March 2011

Planisware™ experienced an outstanding year in 2010 with several key achievements - persistent revenue growth, continued cultivation of a strong customer base, a new release of its Product Portfolio Management solution, positive coverage from industry analysts, and the successful organization of customer events world-wide.

Reporting earnings of \$34 million in revenue, Planisware experienced growth and profitability for the 15th straight year. With the addition of 12 new customers in 2010 - including Saudi Aramco, Abbott, and Generali - and the renewal of license extensions by nearly 20 existing customers, Planisware continued to post solid gains and to strengthen its leadership position within the new product development space. By close of 2010, Planisware had a corporate presence within 50% of the world's top 20 largest R&D companies, managing a cumulative R&D budget of \$67.1 billion. To support its growth, the company expanded its workforce and moved to larger office spaces in both San Francisco, California and Munich, Germany. Planisware expects to achieve double digit growth again in 2011, thanks to a solid pipeline of potential new customers.

With Planisware 5 well established among Planisware's existing customer base, 2010 brought the announcement of Planisware Version 5.2, the most ambitious service pack to date. Planisware Version 5.2 incorporates user-requested upgrades like new interfaces with Microsoft SharePoint® and Oracle® Primavera, improved integration with Microsoft Office®, and numerous usability enhancements. Showcased in Version 5.2 is a new comprehensive Product Portfolio Management module enabling users to go beyond the development phase of new products, to manage the full product lifecycle. Providing business and decision support functionality, it is complementary to Product Lifecycle Management (PLM) solutions that focus on process and detailed product data. Capabilities include Profit & Loss Statements, Competitive Analysis Assessment, Requirements & Release Management, and Product Configuration Management.

“We have great expectations for 2011. Our high-end market position and the addition of the Product Portfolio Management module enabled us to post a very strong year in 2010 despite a globally depressed environment,” stresses Pierre Demonsant, CEO and founder of Planisware. “This trend will continue to grow in importance this year. Our solutions are a perfect match for many product organizations, which, in conjunction with our outstanding execution capabilities, will translate to greater market share for Planisware and increased leadership within our markets. Our solution is delivering a 3-digit return on investment and Planisware continues to benefit from a very strong word-of-mouth from our customer base, a key ingredient of Planisware's success these past years.”

Planisware's remote product delivery service also made great strides with the adoption of an upgraded

CIMdata PLM Industry Summary

SaaS platform. Planisware's SaaS offering, Planisware Live™, was designed to minimize deployment time and lower costs, offering companies a jump-start for implementing Planisware in a secure and scalable environment. After scrupulous evaluation, Datapipe was chosen as the new data center to host this offering: with SAS 70 Type II certified facilities, data security is ensured, and its facilities are located around the world, making it a good fit for serving Planisware's global community. In 2010, revenue from Planisware Live experienced a 200% increase over the previous year.

Dedicated to providing first-class service to its user community, Planisware bolstered its offering of training courses. In addition to on-demand sessions, standardized week-long courses taught participants about topics such as web-based administration, system maintenance and configuration skills in a personalized and interactive setting. Furthermore, continuing a long established tradition, the annual Planisware European and Life Sciences User Conferences featured many workshops around advanced technical subjects presented by leading Planisware consultants and product architects.

The 2010 European and Life Sciences User Conferences – held in Paris, France, and Boston, Massachusetts, respectively - were each met with record-breaking attendance and high praise from participants. Planisware also debuted a one-day User Summit, designed to gather the rapidly growing German customer base and foster networking among customers in Munich, Germany. All three Planisware conferences will be held again in 2011: the U.S. Life Sciences User conference will be held on May 25th and 26th in Miami Beach, Florida; the German Summit is planned to take place on June 6th in Munich, while the European User Conference is scheduled for this fall in Paris.

For more information on Planisware, please visit <http://www.planisware.com>.



[Click here to return to Contents](#)

SpaceClaim Continues Rapid Global Growth and Market Expansion in 2010

8 March 2011

SpaceClaim marked another year of rapid growth in 2010. Sales tripled, supported by important new customer wins within large manufacturing companies, including Tyco Electronics and LG Electronics.

“SpaceClaim software is enabling a fundamental shift in large engineering organizations,” said Chris Randles, SpaceClaim President and CEO. “We are enabling cross-functional engineering teams to rapidly develop and test new 3D product concepts before committing to costly and expensive detailed design in CAD. While release to CAD is still the usual last step before manufacturing, SpaceClaim is allowing teams to explore and make vital design decisions quicker, faster and with a lower total cost-of-ownership. Engineers are finding that SpaceClaim's 3D Direct Modeling software is fast, flexible, and CAD-neutral – most importantly, our engineering users are reporting that it is much easier to learn and use than traditional CAD tools. These customer outcomes fueled our very rapid growth in 2010, which was another record year for us. We anticipate similar growth trends in 2011 as we continue to attract more customers, OEMs and resellers.”

Highlights of 2010 included:

A 40% year-over-year increase in new customers;

An OEM agreement with \$2.1 billion global manufacturer [TRUMPF](#) to make SpaceClaim Engineer as the 3D direct modeling solution for its customers;

An enhanced version of the [ANSYS SpaceClaim Direct Modeler](#) software, the result of an OEM

CIMdata PLM Industry Summary

agreement with ANSYS announced in 2009. ANSYS is the world's largest engineering simulation technology company;

Expansion of the [global reseller network](#);

The sixth release of [SpaceClaim's ground-breaking software](#), meeting the needs of large manufacturers with new levels of design flexibility and strengthened sheet metal capabilities. (The seventh release, [SpaceClaim 2011](#), was release in January of 2011);

 [Click here to return to Contents](#)

Implementation Investments

Cleaner Energy, Fluid Processes: Viessmann Selects Siemens PLM Software Technology to Enhance Efficiency and Productivity

9 March 2011

[Siemens PLM Software](#) announced that Viessmann, an international leader in the production of heating systems, selected Siemens PLM Software's technology to enhance process efficiency and increase productivity.

Viessmann will use [Teamcenter® software](#) and [NX™ software](#), a comprehensive digital product development solution to set up an integral design and development PLM structure to support its future growth strategy.

Until a few years ago, Viessmann's strategy was focused on organic growth through innovation and globalization. Due to the structural changes in heating technology towards renewable energies, this strategy was expanded and smaller-scale specialists were acquired.

“Our growth strategy enabled us to extend the reach of our technological basis at the right speed, and to react promptly to changing market requirements,” said Dr. Harald Dörnbach, CEO of Viessmann IT Service GmbH. “However, the acquisitions, while successful, created a mixed IT landscape comprising of a number of systems. With the switch to Teamcenter and NX, we are replacing an older infrastructure, and at the same time establishing a homogeneous, global IT environment to help deliver better processes and increased productivity.”

Viessmann selected Siemens PLM Software's solutions following an extensive benchmarking process, taking into account all design and data management functions. As part of the evaluation process, CAD data was migrated from old records and from numerous acquired companies to test the openness of the solution. In the Data Management unit, the company conducted in-depth checks to test the installation of the solution. Siemens PLM Software's solutions topped products from well-known competitors in the test trials and were the clear winners. The success in the benchmarking process further solidified an already established relationship with the customer.

“Siemens PLM Software is committed to helping leading customers, like Viessmann, as they evolve their business model to meet market demands,” said Urban August, senior vice president and managing director, Germany, Siemens PLM Software. “Siemens PLM Software's technology enables companies to consolidate design and development on a single open platform and provides a scalable solution that can grow with the company and enhance innovation every step of the way.”

About Viessmann

CIMdata PLM Industry Summary

The Viessmann Group is an international leader in the production of heating systems. Founded in 1917, the family company is managed by its board under the chairmanship of CEO Dr. Martin Viessmann. Total revenue is around 1.6 billion euros with a workforce of some 8,900 employees. Viessmann is international in nature, with 16 plants in Germany, France, Canada, Poland, Hungary, Austria, Switzerland and China, sales organizations in 37 countries and 120 sales offices around the world. It earns 54 per cent of its revenue overseas. Its heat generators for all energy sources produce 1.5 to 20,000 kW and are available for houses, maisonettes and apartment blocks, trade and industry and for local heating networks.

 [Click here to return to Contents](#)

IFS signs MRO provider Alitalia Maintenance Systems S.p.A.

4 March 2011

Alitalia Maintenance Systems S.p.A. ([AMS](#)), a leading maintenance, repair and overhaul (MRO) company, has purchased IFS Applications to optimize its MRO processes and shorten turnaround times. The agreement, which includes IFS Applications licenses, maintenance and services, is valued at more than €1 million.

AMS delivers maintenance and repair services on commercial jet engines in its facility in Rome. IFS Applications will enable AMS to meet the increasing challenges of its industry by ensuring consistent, reliable documentation of processes and work. By the fall of 2011, MRO processes will be fully integrated into one MRO and ERP system delivered by IFS, reducing turnaround times and optimizing the spare parts and maintenance planning functions. The solution will also provide full ERP functionality by delivering human resource management, supply chain management and financials, all in a single, fully integrated, enterprise-wide solution.

“IFS Applications is a powerful, effective product that offered the best engine overhaul solution. With its agile implementation methodology, IFS can provide rapid implementation to satisfy the growth strategy of AMS in the future. We were also impressed by the industry experience of IFS and the high levels of competence displayed by IFS consultants in aerospace and defense, and especially in the engine overhaul processes,” Giancarlo Rago, Purchasing and IT Director at AMS, said.

Peter Höhne, Vice President Sales & Marketing, IFS Central Europe, added, “We are very proud to welcome AMS as a strategic customer in aerospace and defense MRO, one of our focused segments. We are pleased to have met the demanding industry-specific requirements of AMS with our dedicated MRO functionality and our depth of knowledge in the segment. With our Italian partner, Insirio, with his headquarters in Rome, we also have a strong and reliable integrator onsite.”

Aerospace and defense is one of IFS’ targeted market segments. IFS Applications™ provides market-off-the-shelf component-based solutions that support Performance Based Logistics (PBL), Contractor Logistics Support (CLS), and Fleet Operator programs; and solutions for Defense Manufacturing, Maintenance Repair and Overhaul (MRO), Asset & Fleet Management, Supply Chain Management and Product Lifecycle Management.

Customers include the United States Army and Air Force Materiel Commands, the British Navy and Army and the Norwegian Navy and Air Force, as well as the Eurofighter consortium. Commercial MRO shops and service operators include Bristow Helicopters, Aero-Dienst GmbH, K&L Microwave, Hawker Pacific, Ensign Bickford, Todd Pacific Shipyards and Lufthansa Technik Qantas (LTQ, formerly known as Jet Turbine Systems). In addition, IFS provides solutions to original equipment manufacturers

CIMdata PLM Industry Summary

(OEMs) such as General Dynamics, Lockheed Martin, BAE SYSTEMS, Saab and GE Aircraft Engines.

 [Click here to return to Contents](#)

Mentor Graphics Helps CamSemi Replace Design and Verification Flow to Improve Simulation Performance and Time to Market

9 March 2011

Mentor Graphics Corp. announced that it assisted [CamSemi](#) in replacing their integrated circuit (IC) design and verification flow with Mentor tools to improve simulation performance and time to market. Cambridge-based CamSemi is a global leader in the development and supply of power management ICs for more energy-efficient, low-cost power supplies and lighting. Working with Mentor Graphics, CamSemi was able to replace a design and verification flow from a major supplier with the Mentor® Custom IC design and verification platform while keeping their design project on schedule.

The adoption of the Mentor tool flow came at a critical time for CamSemi as they were approaching the final stages of a design and verification project. Moving from a legacy design and verification environment to the Mentor tool flow was accomplished by addressing every aspect of the transition. The Mentor consulting organization worked onsite with the CamSemi design team to ensure that vital knowledge exchange and training was immediate and customized. The Mentor technical team in the deep submicron division delivered exceptional software products; the IC Station® tool suite, the Questa® ADMS mixed-signal simulation platform, and the Eldo® Classic Spice simulator that allowed CamSemi to switch out the old tools without losing any functionality or compromising their design data. Mentor achieved a 2X increase in simulation throughput for CamSemi.

“Moving from a well entrenched design and verification environment to something new is an enormous task even when you’re not faced with an impending tapeout,” said John Greenwood, Analog Design Team Manager, Cambridge Semiconductor. “Mentor put a great deal of time into anticipating possible problems, and working to dismiss them before they could manifest themselves. This attention to detail was critical to the ultimate success of the replacement process.”

“The term ‘partner’ is used all too often as a grandiloquent substitute for supplier or customer,” said Nigel Heather, VP of Engineering, Cambridge Semiconductor. “I feel that in this circumstance it is completely appropriate. Not only did the Mentor team work hard for us, they were incredibly nice, patient people and great ambassadors for the company. So, my sincere thanks to the Mentor team.”

 [Click here to return to Contents](#)

Pharmaceutical Enterprise TOLMAR Selects Pilgrim Software’s Integrated Quality & Compliance Solutions

7 March 2011

[Pilgrim Software, Inc.](#), announced that TOLMAR Inc., a Colorado-based pharmaceutical research, development, manufacturing and commercial operations company, has named Pilgrim as its automated risk, compliance and quality management systems provider.

[TOLMAR](#) will implement Pilgrim’s integrated solutions for [Document Management](#) and [Corrective & Preventive Action \(CAPA\) management](#). With the Pilgrim platform in place, the company will strengthen and sustain its ongoing compliance while improving operational efficiencies and cost

containment efforts.

In addition to the document and CAPA management systems, TOLMAR will gain rapid data visibility and have total control over the format, appearance, and context of all quality reports using Pilgrim's [SmartInsight™ Report Writer](#). This solution allows business users to instantly create professional, custom log reports that they can save and reuse whenever they wish.

“TOLMAR is adapting this automated, integrated solution model as we prepare our business for the future,” said Francisco Gutierrez, Vice President of Quality & Site Operations for TOLMAR. “We identified the need to enhance our QA procedures and workflow with what Pilgrim provides – a fully integrated process that will greatly improve efficiencies and allow enterprise-wide visibility into key quality and compliance data in real time and across all functions.”

 [Click here to return to Contents](#)

Radan Customer Case Study: Wired DNC Bites the Dust

8 March 2011

Transmitting CNC codes to their two profile burning machines was becoming more and more of a headache for metal component manufacturers and fabricators Nichol McKay.

Dust, from the intensive cutting and welding which takes place in the same workshop, was constantly clogging the cables, sockets and connectors feeding code to the gas profiling centres, causing regular breakdowns.

The problem was compounded by moisture and fumes also affecting the cables and computer keyboards. Senior engineer Tim Paterson says the wiring system frequently used to break down during the night when no engineers were available to clean it. “We’d often lose the rest of the night shift on both machines. Even when it broke down during the day it meant an engineer had to stop what they were doing and repair it.

“Since we’ve had the solution in place, it’s saved us a lot of man hours carrying out repairs, and prevented many, many hours of downtime.”

That solution came in the form of a wireless barcode system to transmit the CNC codes from the server in the offices, to the two Messer Cortina machines.

Nichol McKay, which is based at Prestwick Airport in Scotland, manufactures components used in a wide range of products for a number of industries, including power generation, fork lift truck chassis, agricultural machinery, and earth moving equipment. Their CNC cutting machines are driven by the sheet metal software [Radan](#), including two Amada and two Trumpf punches, an LVD press brake, four Trumpf lasers and the two profile burning centres. “Without the CNC programming that Radan produces for us, we just wouldn’t be able to carry out any of the work we do,” says Tim Paterson. “We’ve used Radan, from Planit Software, for around ten years, and it’s absolutely essential to our business.”

During that time the CNC codes were fed to all the machines by cable from the server, as part of Planit’s Manufacturing Control Solutions. He says using MCS reduced the time needed to load programs by providing automatic upload, download and drip feeding of NC code files directly from the server to any of those machine tools. “Data is transferred at the highest possible speed without the risk of corruption.” MCS is a customisable software and hardware based solution, and because the system is totally independent, it was able to communicate effectively with Nichol McKay’s Amada, Trumpf, LVD and

Messer Corina machines.

However, while the cable-based ethernet system was ideal for sending postprocessed code to the punches, lasers and press brake, the CNC code sent to the Messer Cortinas began to experience disruption. With the ever increasing work in the flame profiling and welding shed, the dusty and moist atmosphere affected the computer keyboards and cable connections, causing the growing number of breakdowns. “It was becoming so unreliable that we spoke to Planit to see if there was a way round the problem, and they came up with the wireless solution.”

The wires linking the profile cutters to the server were all removed, and a wireless box was fitted inside the control of both machines. A wireless router was mounted in the shed, which now handles all communication between server and machine.

In addition, because the computer keyboards were also affected by the atmosphere in the shed, they were replaced with a barcode system. “We print out the Radan setup sheet, which has the part numbers and barcodes on it. The barcode is the file name for the CNC program. Previously, the operators had to go across to the terminal, manually type in and search for the part numbers, which also meant there was the chance of errors. Now, rather than the operator having to type in the part number, he has a barcode reader at his machine that tells him which program to use.”

The flame cutters are used to manufacture the majority of Nichol McKay’s heavier products in 15mm to 70mm steel, such as bases for mobile power generators, fork lift truck chassis, and components for earth-moving equipment.

“With [Planit](#)’s wireless DNC system there are no wires, no mess, no downtime caused by breakdown, and no errors. It not only provides the solution to our problem, it also gives us peace of mind,” says Tim Paterson.

 [Click here to return to Contents](#)

Shengli Engineering and Consulting Company Limited Selects Intergraph® SmartPlant® Enterprise Solutions

8 March 2011

Shengli Engineering and Consulting Company Limited (SLECC), a registered survey and engineering institute in China, has chosen Intergraph® SmartPlant® Enterprise solutions, including SmartPlant 3D, to execute its design and engineering projects.

To enhance its competitiveness in the marketplace, SLECC wanted an integrated engineering, procurement and construction (EPC) solution that would further increase safety, quality and productivity, as well as accelerate project schedules. SLECC chose Intergraph’s SmartPlant Enterprise suite of solutions because of its proven track record in the industry. SLECC will implement the solutions company-wide for all of its design and engineering projects. SmartPlant Enterprise will be the integrated engineering platform supporting improved design workflows and effective project management to enable SLECC to meet tight schedules and true demands for productivity increase.

SmartPlant Enterprise is an integrated solutions suite that provides full design, construction, materials management and Capital Project Lifecycle Management (cPLM) capabilities needed for the creation, safe operation and maintenance of large-scale process, power, marine and offshore facilities. SmartPlant 3D effectively enables optimized design, increasing productivity and shortening project schedules. Through the leverage of success-critical project information and knowledge to improve and automate

work processes, SmartPlant Enterprise solutions can improve engineering efficiency by up to 30 percent.

“Our drive to continuously improve our service offering and expand our business globally was a major consideration in our choice of Intergraph’s SmartPlant Enterprise,” said Mr. Yang Li Peng, Information Management System project director at SLECC. “We recognize that SmartPlant Enterprise is proven, established technology in the marketplace and offers a powerful portfolio of best-in-class applications that will enable us to be more responsive to the dynamics of our market.”

 [Click here to return to Contents](#)

Yokogawa Achieves 5X Faster Programmable Logic Controller Performance With Synopsys' Processor Designer

7 March 2011

[Synopsys, Inc.](#) announced that Yokogawa Electric Corporation used Synopsys Processor Designer to achieve ultrafast ladder program processing performance for their latest FA-M3V programmable logic controller (PLC). Yokogawa also saved significant development and verification effort with Processor Designer since the tool automatically generates software development tools such as C-compiler, assembler/linker, debugger and the instruction set simulator (ISS) needed for early software development prior to processor availability.

"Our new PLC FA-M3V has achieved the fastest performance we've ever seen with our latest 'Vitesse Engine' core customized for ladder language program processing," said Hirofumi Okamoto, group leader of the PLC Development Division, Yokogawa Electric Corporation. "With Processor Designer, we were able to develop this ultra-high performance processor using significantly less time and effort than we originally planned."

Yokogawa achieved their improvements in performance and time savings by leveraging Processor Designer's profiling capability to explore and optimize the processor's architecture. These optimizations enabled Yokogawa to meet their target ladder program processing performance goal of 3.75nSec/instruction – 5X faster than previous versions. By optimizing the LISA language input specification and hence the resulting RTL code, the design team also reduced power, gate count and total system development time en route to a successful tape-out.

Processor Designer accelerates the design of both application-specific processors and configurable accelerators through automated software development tools, RTL and ISS generation from a single, high-level specification. These application-specific processors and configurable accelerators are increasingly essential to support the convergence of multiple functionalities all on a single system-on-chip (SoC). Processor Designer is used to develop a wide range of processor architectures, including architectures with DSP and RISC-specific features as well as single instruction multiple data (SIMD) and very long instruction word (VLIW) processors.

 [Click here to return to Contents](#)

Product News

Advanced Magnet Lab Becomes COMSOL Certified Consultant

4 March 2011

CIMdata PLM Industry Summary

[COMSOL, Inc.](#) announced that Advanced Magnet Lab, Inc., (AML) has become a COMSOL Certified Consultant. AML provides technology and expert services for the design and manufacture of advanced coils, magnets, and magnet systems for a broad variety of applications in such markets as energy, aerospace and defense, medical, and advanced research. AML offers its clients numerical analysis capabilities including multiphysics FEA, multi-objective optimization, and dynamic analysis.

Headquartered in Palm Bay, Florida, AML has more than 15 years experience designing, optimizing, manufacturing, and testing electromagnetic and electromechanical systems. Core to AML's technology and capabilities is a team of international experts in the fields of high-power magnet systems, superconductivity, robotics and manufacturing automation. AML's comprehensive technology portfolio includes CoilCAD® AML's proprietary 3D software considered the most advanced coil design software available; Double-Helix™ magnet technology, a discovery that enables "perfect" magnetic fields with virtually no limits for configuring magnetic field shapes.

"We're delighted to partner with an industry leader such as Advanced Magnet Lab," says Bernt Nilsson, Senior VP of Marketing, COMSOL, Inc. "AML further extends the value of COMSOL's technologies to our growing base of customers working with advanced magnets. Magnets are used everywhere, and the internationally recognized expertise offered by AML enables us to better serve new product and new technology developers in such exciting fields as medical diagnostics and treatments, new energy storage and energy generation systems, and advanced aerospace and defense systems."

"As a certified COMSOL Consultant," says AML's Senior Research Scientist and frequent COMSOL Conference contributor Dr. Philippe J. Masson, "we are able to offer one-of-a-kind, specialized engineering, design, analysis, and optimization services to private, commercial, or governmental entities needing to solve the large-scale, multi-physics problems encountered in applied superconductivity, electromechanical, magnet, and magnet systems."

In addition to design, analysis, and optimization, AML's application engineers can help clients take their concepts through the entire development, engineering, prototype testing, and manufacturing process. "The combination of COMSOL Multiphysics and our unmatched 3D coil design software and automated construction processes enable rapid deployment of complex state-of-the-art magnets," says Mark Senti, AML's President.

For further information about COMSOL Certified Consultants, visit <http://www.comsol.com/company/consultants>

 [Click here to return to Contents](#)

Agilent Technologies' Latest GoldenGate RFIC Simulation Software Raises the Bar on Performance and Usability

10 March 2011

Agilent Technologies Inc. announced the latest release of its RFIC simulation, verification and analysis software – [GoldenGate version 2011](#).

This release enhances Agilent's leadership in advanced-node RFIC design with improved performance, fast mismatch analyses for analog/RF applications and a new easy-to-use graphical user interface. The release also extends the software's RFIC analysis to more easily incorporate package and board effects.

"There are various ways to approach performance enhancements," said Paul Colestock, product planning and marketing manager with Agilent's EEs of EDA organization. "Agilent's approach is to

CIMdata PLM Industry Summary

provide continuous improvement on the circuits that our customers care most about. GoldenGate 2011 stays true to that heritage.”

Agilent’s GoldenGate version 2011 software delivers the following updates for RF design analysis:

- Carrier-analysis improvements that deliver significantly better scalability and performance on multicore CPUs, further extending Agilent’s RF performance leadership.
- Improved performance of carrier and SSNA noise analyses.
- Fast yield-contributor analyses for RF and analog/mixed-signal designers, including DC, AC and oscillator analysis.
- Enhanced fast circuit-envelope analysis that accelerates RF functional path simulations by an order of magnitude or more, with broader support for RFIC-centric source configurations for models including memory effects.
- An enhanced crystal oscillator convergence option that reduces the frustration of simulating crystal oscillators.

GoldenGate version 2011 boasts a number of improvements for wireless design verification. Fast mismatch analysis accelerates the block and functional path verification that RFIC designers perform every day, without loss of accuracy, including new support for Cadence corners tool.

The updated adslib for the GoldenGate library now includes delay-defined transmission lines and Philips-TU Delft standard/user-defined bondwire models. Using this, engineers can simulate more of their designs by including RF package and board effects. Additionally, by closing the loop between system and circuit designers using the new SystemVue and GoldenGate links and flows, designers can greatly accelerate system-level verification of RFICs.

Agilent’s GoldenGate version 2011 also improves both the tool’s usability and in turn, user productivity. A new tree/tabbed graphical user interface for the Cadence Analog Design Environment, for example, eases the configuration of RF analyses and environment/options selection.

About GoldenGate

GoldenGate is a trusted simulation, verification and analysis solution available for integrated RF circuit design within the Cadence Virtuoso design flow. Its simulation algorithms are optimized for the demands of today’s complex RF circuit designs, enabling full characterization of complete transceivers prior to tape-out. GoldenGate is part of Agilent’s RFIC simulation, analysis and verification solution that also includes Momentum for 3-D planar electromagnetic simulation, Ptolemy wireless test benches for system-level verification, and the Advanced Design System data display for advanced data analysis. This suite links the RF system, subsystem, and component-level design and analysis as part of a unique and comprehensive RFIC design flow. GoldenGate is fully compatible with Cadence IC5 and IC6 platforms.

U.S. Pricing and Availability

Agilent’s GoldenGate version 2011 is available now, with a starting price of just under \$25,000.

For more information on GoldenGate version 2011, go to <http://www.agilent.com/find/eesof-goldengate2011>. To request a demo of GoldenGate version 2011, visit <http://www.agilent.com/find/eesof-goldengate-demo-pr>.

CIMdata PLM Industry Summary

Agilent will demonstrate its newest design and test innovations for advanced RF and microwave research, development and manufacturing at the [2011 IEEE MTT-S International Microwave Symposium](#), June 7-9, at the Baltimore Convention Center, Booth 813. Attendees will be able to join Agilent and its solution partners on [Agilent Avenue](#) to connect expert to expert with leaders in the industry.

 [Click here to return to Contents](#)

CCE's EnSuite Enhanced with Tools for Reverse Engineering & Rapid Prototyping

10 March 2011

CCE announced the release of EnSuite with new tools for reverse engineering and rapid prototyping applications.

EnSuite's Model Compare functionality has been extended to compare Native CAD data with scanned Point Cloud data, and STL files. The results of the comparison are visually displayed showing the deviations from the original design. The results can also be exported to an XLS file. This functionality is critical in reverse engineering and rapid prototyping applications to ensure the physical part matches the CAD data within specified tolerances.

New tools for computing surface area, bounding volume and 3D measurements for Point Cloud and STL files have also been added. Besides, EnSuite incorporates viewers for Point Cloud, STL and native CAD files.

“With widespread availability of 3D Scanners & Rapid Prototyping, EnSuite provides users critical tools to maximize the application of these technologies in their product development, competitive benchmarking, quality assurance and rapid manufacturing activities”, said Vinay Wagle, CCE's VP of Sales & Marketing.

EnSuite provides quick access to critical engineering information residing in CAD data, no matter which CAD system was used to author it. It's extremely user-friendly interface is designed for users who may not be trained in using CAD systems, but need to access CAD data for their day-to-day work. EnSuite supports all major 3D CAD formats including CATIA V4, CATIA V5, NX, Pro/E, SolidWorks, Parasolid, JT, CGR, STL, Solid Edge, 3D PDF, IGES and STEP.

 [Click here to return to Contents](#)

Coventor SEMulator3D Software Reduces Cost and Development Cycles for Semiconductor and MEMS Processes

7 March 2011

[Coventor[®], Inc.](#), a leading supplier of software for developing micro-electromechanical systems (MEMS), announced availability of SEMulator3D[®] 2011, the latest version of its [virtual fabrication software](#) for semiconductor and MEMS process development organizations. SEMulator3D is already in use by the world's largest semiconductor companies, MEMS integrated device manufacturers (IDMs) and MEMS foundries for tasks ranging from process integration and documentation of advanced logic and memory process nodes to MEMS design verification, and has provided rapid ROI by reducing time-consuming, costly build-and-test cycles.

The [SEMulator3D 2011 release](#) provides a three-fold performance boost in model building time and new

CIMdata PLM Industry Summary

3D mesh generation capabilities that create silicon-accurate meshes for physics-based simulations used to optimize the performance and manufacturability of semiconductor and MEMS devices. In addition, Coventor is providing the first release of [SEMulator3D Reader](#), a downloadable interactive 3D model viewer that will streamline communications among process development team members and with suppliers and customers.

The release of SEMulator3D 2011 is expected to increase adoption of 3D virtual fabrication for existing process integration and documentation applications, as well as expand the use model into emerging applications, including novel semiconductor processes, non-destructive metrology, and [highly integrated MEMS+CMOS processes](#).

"IBM uses Coventor's SEMulator3D to emulate advanced FEOL, MOL and BEOL integrated processes, with specific attention to 22nm technology and beyond. SEMulator3D allows modeling of a complete process sequence and creates realistic 3D models that can be shared with colleagues. The process/layout editor tools allow development and calibration of a process emulation and expands our understanding of the resulting structures to a variety of layouts," said David Fried, 22nm chief technologist at IBM. "With this capability, our visibility into the full technology implication of process selections and changes has been improved. SEMulator3D has helped IBM predict problems that otherwise would only have been found by subsequent testing and physical failure analysis."

Effective Virtual Fabrication Methodology

The cost of a single wafer run today ranges from \$100k for specialized MEMS devices to over a million dollars for the latest nanometer-scale semiconductor design on 300mm wafers. This presents a significant process development and integration challenge for which SEMulator3D's virtual fabrication methodology is uniquely qualified to address according to Coventor's CEO Mike Jamiolkowski:

"Virtual fabrication in the fab and the lab is critical to reducing the time and cost required to leverage new process technologies. SEMulator3D 2011 takes process modeling to the next level by enabling greater productivity and more accurate, predictive results. Not only does this help engineers save the cost of multiple test wafer runs, it means they can get new processes into production faster and spend more time on process innovation for the next generation."

"IMEC uses SEMulator3D for process documentation and design verification. Our SiGeMEMS-above-IC technology allows product developers to monolithically integrate MEMS devices with CMOS circuits, enabling new applications and reduced form factors. By providing SEMulator3D process files with our PDK, we enable designers to verify manufacturability of their designs before tape-out for fabrication. Using SEMulator3D, we can ensure that designers receive the accurate and complete process information they require," commented Stephane Donnay, Ph.D., CMORE program manager at IMEC.

Fast 3D Process Modeling

SEMulator3D 2011 sets new standards in performance, accuracy and ease of use. Coventor extensively profiled customer test cases to identify steps that required the most computing time, and then optimized the algorithms and implemented parallel processing support (making use of multi-core CPUs) to achieve performance gains of three-to-four times over the previous release. By way of example, SEMulator3D 2011 is more than three times faster for a 25nm flash memory application. In addition, the tool now detects incremental changes to the process description and automatically re-builds only subsequent process steps, saving on average 50 percent or more in model development time.

CIMdata PLM Industry Summary

"SEMulator3D is our tool of choice for experimenting with new technologies and ideas," said Thomas Ostermann, staff engineer, Power Technology Development, Automotive Power at **Infineon Technologies** Austria AG. "We also use SEMulator3D to create 3D cross sections for documentation and training of new colleagues. The ability to generate 3D pictures and animations makes it much easier to explain a process."

Silicon-Accurate 3D Behavioral Simulation

While SEMulator3D has long had the ability to create silicon-accurate shapes that can be difficult to capture using conventional mechanical CAD and TCAD tools, its new mesh generation capability means that device simulations are no longer limited to the idealized device models so often used today. Surface and volume meshes can be exported to finite element analysis and TCAD simulation tools in multiple industry-standard formats, including *ans* (Ansys), *dxf*, *obj*, and *unv* formats. The meshes are of uniform quality and density suitable for simulation of many physical domains, including mechanical, thermal, and electromagnetics, in addition to coupled physics such as electromechanics.

Easier 3D Model Sharing

The new SEMulator3D Reader is a full-featured 3D viewer that uses a compact file format designed for portability. It enables process development and foundry service teams to share 3D device models that convey far more information than the static screenshot images or PowerPoint slides typically used to communicate with colleagues or customers. Users are able to interact directly with the models to manipulate the 3D view, see a cross section at any location, toggle visibility of layers, and animate the fabrication process. Comments and annotations can be added for each process step to further streamline communications and documentation throughout the entire development cycle. A downloadable version of the [SEMulator3D Reader](#) is immediately available with online access to a variety of sample semiconductor and MEMS 3D models.

Availability

The [SEMulator3D 2011 release](#) is shipping today.

 [Click here to return to Contents](#)

Dassault Systèmes' DraftSight Now Available for Linux

9 March 2011

Dassault Systèmes (DS) announced the availability of a beta release of DraftSight for Linux. DraftSight is a no-cost 2D CAD product for CAD professionals,

DraftSight for Linux allows users to create, edit and view DWG files. DraftSight generally takes a few minutes to download and runs on multiple operating systems, including Linux and Mac OS in beta, and Windows XP, Windows Vista and Windows 7 in general release.

"We're very excited to finally announce to the DraftSight community the availability of Linux in beta for DraftSight," said Aaron Kelly, senior director, DraftSight, Dassault Systèmes. "We've been working on the Linux version since the launch of DraftSight and have seen a significant rise in demand for this over the last few months. It's been our objective since the start to respond to users by providing them with products that will meet their needs."

DraftSight beta users have access to no-cost Community Support available within the DraftSight [open, online SwYm community](#) where they can access support and training resources, along with an

CIMdata PLM Industry Summary

environment to interact, ask questions and share their opinions. The DraftSight community is one of the first social networks designed by engineers for engineers, designers and architects.

For more information, please visit DraftSight.com. Also, check out DraftSight on [Facebook](#) and [Twitter](#).

 [Click here to return to Contents](#)

EPM Live Launches WorkEngine's Enterprise Portfolio Management Capabilities for SharePoint

10 March 2011

[EPM Live](#), a global leader in Enterprise SharePoint Project and Work Management applications, announced its launch of WorkEngine's Enterprise Portfolio Management Capabilities for SharePoint. Building on its foundation aligned with project and work execution, WorkEngine has extended its core capabilities to include Portfolio Planning, Portfolio Modeling and Portfolio Optimization with an emphasis on costs and resources. WorkEngine supports end-to-end Project and Portfolio Management disciplines through the entire life cycle of your projects as well as non-project work.

“This launch marks a critical milestone for businesses looking to maximize return on their SharePoint investment by adding a Project and Work Management Solution to their platform. WorkEngine is now a true end-to-end Enterprise Project and Portfolio Management (PPM) system for SharePoint,” said Joe Larscheid, CEO of EPM Live.

EPM Live has also released a new application, PPM WorkEngine, to align the new capabilities with the business. “Apps are the future; our vision is to not only provide a wide variety of applications that will apply our powerful capabilities to various work such as projects, products and services, but we want our customers to have them at their fingertips, at no additional cost,” said Joe. The WorkEngine product combined with numerous work apps will not only give businesses the tools they need to manage all projects and all work across their organizations, but will do so by accommodating all user maturities and all processes, making the WorkEngine SharePoint platform relevant to any business, simple to deploy and one of the most cost effective systems on the market.

WorkEngine's new Enterprise Capabilities include the following work features:

[Enhanced Resource Management](#) in SharePoint:

Resource Capacity Planning

Resource What-if Modeler

Resource Calendars

Resource Negotiations & Workflow

Capacity Demand Center for Resource Managers

Convert Approved Budgets into Resource Requirements

Manage Resource Capacity Plans from Microsoft Project

Compare Resource Capacity Plans in your Microsoft Project Plans

Enhanced [Cost Management](#) in SharePoint:

Cost Planner

Cost Analyzer

CIMdata PLM Industry Summary

Cost Scenario Modeling
Configurable Cost Categories Structure
Unlimited Cost Types (Budget, Forecast, Benefits, Revenue, Actuals, etc.)
Resource Revenue Forecaster
Multiple Resource Rates
Compare Cost Plans with Timesheet Actual Cost
Enhanced [Schedule Management](#) in SharePoint:
Dynamic Gantt Control
Multiple Work Planner Templates
Build Team with Skill Replacement
Work Planner Assignments
View Resource Workload vs. Availability
View Resource Workload vs. Capacity Plan
Update Approvals

These new features will allow organizations to get the full PPM experience from their WorkEngine environment. WorkEngine's Portfolio enhancements will enable organizations to align investments with corporate goals, manage cost and resources, prioritize strategies, and use scenario modeling to optimize the value of work to the business.

"The upcoming PPM WorkEngine launch will provide our customers with all the functionality they need to manage their work through all stages of the Project and Portfolio Management life cycle. In addition, they will be able to do so right within their SharePoint environment. This has been EPM Live's vision since day one," said Joe Larscheid, CEO of EPM Live.

EPM Live will continue to provide cutting-edge, cost effective project and work management solutions leveraging the Microsoft technologies organizations already own to increase the value of their current IT investments. EPM Live's solutions include capabilities such as Portfolio Management, Project Management, Cost Management, Time Management, Resource Management, Service Management, Agile Management, Business Intelligence and Collaboration. These capabilities are all designed to work together or separately to meet any business specific need.

To learn more about WorkEngine:

Visit the [Website](#)

See "[What's New](#)" (videos included)

View WorkEngine Product [Demo](#)

Attend an Upcoming or On Demand [Webinar](#) (PDUs available)

Access a [Free Trial](#)

 [Click here to return to Contents](#)

CIMdata PLM Industry Summary

Feature-Packed LMS Virtual.Lab Rev 10 Puts Speed and Productivity Center Stage

7 March 2011

LMS International has released the latest version of its integrated solution for functional performance simulation: LMS Virtual.Lab Revision 10. Packed with new features covering the entire space from multi-body simulation to FEM acoustics, this version of LMS Virtual.Lab will take your simulation process to a whole new level.

“With Revision 10, we have placed the focus on speed and productivity. Our acoustic customers will notice significant speed increases thanks to cutting-edge techniques like AML (Automatically Matched Layer) and the new MUMPS solver, while our multi-body simulation users will benefit from significant improvements in solving speed and productivity, for example on managing multiple events with the new Solutions Manager,” stated Stefaan Goossens, Vice-President Simulation, LMS International.

On the acoustics side, FEM acoustics takes center stage with a variety of custom-fit solvers and features for guaranteed speed and process efficiency. Probably the most talked about item is AML (Automatically Matched Layer). Called the “next generation PML” (Perfectly Matched Layer), AML eliminates the need to model the absorbing PML layer. The solver does it automatically, delivering a simplified FEM mesh close to the radiating system. The FEM elements are purposely kept small so that the meshes are manageable and quickly solved.

Besides AML, other speedy new acoustic features include a MUMPS Solver (Multi-Frontal Massively Parallel Sparse Direct Solver) and VATV (Vibro-Acoustic Transfer Vector), an LMS Patented methodology. New to this release as well is temperature mapping, taking in the effect of temperature on acoustics.

Productivity increases with the popular multi-body simulation (MBS) package, LMS Virtual.Lab Motion, as well. The new Solutions Manager makes it possible to handle large sets of analysis cases, many with automated data management. New as well is the LMS Virtual.Lab Motion-ABAQUS connection for non-linear FE co-simulation. This co-simulation combines the accurate non-linear representation of certain components with the calculation speed of MBS. The continued investment in MBS Solver technology brings yet another significant solver speed improvement in solving realistic models in accelerated timing.

Accurate and fast, LMS Virtual.Lab Durability Thermal Fatigue, provides a solution for high temperature cyclic and creep fatigue. Further improvements to Seam Weld modeling enable accurate and fast fatigue life calculations.

LMS Virtual.Lab Structures, the integrated solution for structural modeling and analysis, includes unified assembly modeling support for ABAQUS, and further advancing the ability to fully automate the process from CAD to CAE Results, with customer documented gains of 50% or more in time it takes to create and post-process a model.

[***Info on the new LMS Virtual.Lab Rev 10 release***](#)

[!\[\]\(82d87ab60ad44c4e802da81612cdea49_img.jpg\) *Click here to return to Contents*](#)

Fujitsu Releases New Virtual Product Simulator with Assembly Process Verification

9 March 2011

Fujitsu Limited and Digital Process Ltd. today announced the release of a new virtual product simulator (VPS), a 3D virtual verification simulation tool for customers in the manufacturing industry. The new

CIMdata PLM Industry Summary

software is available starting today in Japan.

The new software package, called V15L11, enables manufacturers to verify product reliability and the assembly process during the development of electronic devices, such as copy machines and servers, which contain more than tens of thousands of densely packed components, using 3D model-enabled computer simulations. As this verification is conducted during the design and production preparation stages and does not require prototypes, it reduces the need for revisions during subsequent processes, accelerates product development, and reduces costs. It can also lead to improved product quality.

V15L11 is the first VPS in the industry to be able to include electrical wiring (wire harnesses) when verifying assembly processes, thereby further enhancing the efficiency of assembly work during the manufacturing stage. In addition, the package is equipped with a feature that can verify multiple color and shape variations based on a single 3D model, making it easy for manufacturers to develop product variations that respond to increasingly diverse customer needs and the local preferences of consumers around the world.

The new software was developed through the collaboration of the two companies alongside Fujitsu Laboratories Limited and Fujitsu Advanced Technologies Limited.

Background

The manufacturing industry has made great strides in employing VPS systems to virtually verify a product's reliability and assembly process. Assembly process verification is an important process during manufacturing for ensuring that assembly work is properly allocated to each production line and that manufacturing proceeds according to the production schedule.

Previous VPS systems stored data for electrical wiring—which features a shape that can be flexibly and dynamically manipulated—in a special format, making it impossible to include in the scope of assembly process verification. As a result, it was not possible to perform simulations to determine how wiring should be connected, or at which manufacturing stage.

To address these challenges, Fujitsu and Digital Process are offering V15L11, a new VPS that is the industry's first product to be able to verify assembly processes that include electrical wiring. The new product employs a technology developed by Fujitsu Laboratories that handles the data format of electrical wiring—which features a shape that can be flexibly and dynamically manipulated—in the same way as it does other components with rigid, static shapes.

Product Features

1. Enables the verification of assembly processes that include electrical wiring

Previous simulators employed a special data format for electrical wiring, which bends flexibly, that differed from other components with rigid, linear shapes. As a result, it was impossible to verify the assembly process for electrical wiring. The new product makes it possible to perform verification of the assembly process for the entire product, including electrical wiring, in addition to generating assembly animations that serve as operating instructions. It also incorporates features that make editing models more efficient, such as a function for easily revising the torsion of electrical wires.

2. Verify multiple variations using a single 3D model

In order to accommodate the increasingly diverse needs of customers and the local preferences of consumers around the world, it is often necessary to prepare multiple variations of a single product. At the same time, as the assembly process for and components employed in each variation are different,

CIMdata PLM Industry Summary

previous simulators performed verification using different 3D models for each variation. The new product includes a feature that switches between displayed assembly processes based on attribute information affixed to each component. This makes it possible to verify the assembly processes of multiple variations using a single 3D model, thereby significantly enhancing the efficiency of verification work.

3. Color coding based on component attribute information

The new product is equipped with a feature that automatically color codes parts of the 3D model depending on the component's material, processing method, grade, and other attribute information. This makes it very easy for each department, including the design, production preparation, manufacturing, and quality insurance, to distinguish and read what parts pertain to them. For example, by displaying an entire product that has been color coded based on the manufacturing processes employed—such as machining, casting, and forging—each department can easily figure out which components it is responsible for checking.

Pricing and Availability

Product Name		Pricing in Japan (excluding tax)	Availability
VPS V15L11	Digital Mockup	JPY 2.5 million	Available now
	Manufacturing	JPY 4 million	Available now
	Harness	JPY 700,000	Available now

- Pricing above is for a single-client license. VPS/Digital Mockup is a basic module and is required when deploying VPS/Manufacturing and VPS/Harness
- VPS/Manufacturing is an assembly process verification module and VPS/Harness is an optional module for generating and editing electrical wiring.

Sales Target

5,000 licenses over the next three years

[!\[\]\(56585c7ab8768f2ad5d7a55fd30584b3_img.jpg\) Click here to return to Contents](#)

Introducing DARS v2.06: Advanced Chemistry Simulation for Efficient & Green Engineering

9 March 2011

DigAnaRS announced the launching of DARS v2.06, the latest release of their advanced simulation tool for the analysis of complex chemical reactions. The latest version includes an improved user interface, significantly reduced simulation times and improved predictive capabilities.

“From the very beginning our intention was to make DARS the easiest and most accessible simulation tool for understanding and optimizing devices that feature complex chemical reactions. With the release of DARS v2.06 we have finally realized that ambition” says Fabian Mauss, President and Founder of DigAnaRS. *“DARS v2.06 provides users from the automotive, energy and chemical industries with an intuitive and flexible analytic toolkit required to develop more environmentally considerate products in less time than ever before.”*

CIMdata PLM Industry Summary

DARS v2.06 sets new standards in the modeling catalytic converters, including particulate filters. Combined with the predictive reactor and engine models DARS v2.06 also enables the optimization of processes. Kinetic mapping gives users insight into how process parameters influence process efficiency and emission. DARS provides you the tools that explain your results to your colleagues.

DARS 2.06 will be officially launched at the STAR European Conference 2011, which will include presentations and demonstrations that explore all of the new features.

New transient 1D models:

Catalyst model

With the addition of a new catalytic converter model, users can simulate surface and gas phase catalyst behavior, allowing for both detailed and global surface chemical kinetics. The new model includes:

- Representative 1D transient channel model, with heat conduction throughout catalyst.
- Heat and mass transfer between gas and surface.
- Temperature ramp and variable inlet gas composition

Potential application areas:

- Three way- (TWC), NOx storage- (NSC) and Diesel oxidation Catalysts (DOC)
- After-treatment in automotive and power generation engineering
- Combustion applications in chemical, environment and heavy industries.

Diesel particulate filter (DPF) model

A newly developed DPF model allows the simulation of soot removal processes in a dedicated diesel PM filter. The new model includes:

- Representative 1D transient channel model, with heat conduction throughout particulate filter
- Soot deposition and oxidation, soot cake growth
- User defined global catalytic chemistry.

Potential application areas:

- After-treatment in automotive and power generation engineering
- Combustion applications in chemical, environment and heavy industries.
- Stochastic 1-D models for: pipes, intercoolers and PSRs (perfectly stirred reactors)

These standalone transient models complete the 1-D reactor network models available in DARS and enable the analysis of full plants and power trains.

Additional features for the Stochastic Engine Models

A new flame propagation model has been developed for the SRM (stochastic reactor model) SI engine. Soot is now supported for all engine models. The latest version DARS v2.06 couples with 1-D engine simulation tools and now supports GT-Power 7. Potential application areas are Internal Combustion

CIMdata PLM Industry Summary

Engines: combustion investigations, knock conditions, efficiency / performance, emission formation conditions.

Updates in the Graphical User Interface

A valve model for the DICI SRM and a catalyst model are available now into DARS v2.06 GUI.

Scatter plots can be built for stochastic reactor models in order to illustrate for example species or temperature inhomogeneities within the reactor/ in-cylinder gas mixture.

Post processing adds different standard reactors (CV, CP, PSR)

Performance maps such as Φ -T diagrams can now be created with only a few clicks.

Calculations speedup and solver convergence

MPI Parallelization giving massive CPU time reduction for all chemistry in stochastic reactor models (DICI, SI, HCCI).

Optimization of RAM usage by 80% for large mechanisms.

Factor 2 speedup for 0D reactors.

Stiffness removal methodology significantly improves convergence for very stiff mechanisms.

Soot convergence improvement.

RAM memory usage optimized with 80% decrease for large mechanisms.

New DARS API for coupling to other CAE software

DARS v2.06 comes with available API for adiabatic constant volume & constant pressure reactors, (including soot), for the stochastic reactor engine models and for the catalyst model.

For information on all new features in DARS v2.06 please visit [CD-adapco's user services site](#) or [LOGE's website](#).

 [Click here to return to Contents](#)

Lectra Leads the Leather Cutting Solutions Market with Leather Suite V3R1

8 March 2011

Lectra announced the release of the new Leather Suite V3R1, specially designed for leather cutting and aimed at manufacturers in the automotive and furniture markets. This new software suite integrated into Lectra's leather cutting solutions significantly improves profitability for companies that use leather, while also offering a large number of new features. Combined with its service contract, it provides unprecedented added value for Lectra's customers and a rapid return on investment.

Demand in the global leather market, both in the automotive and furniture sectors, has grown significantly, particularly in emerging countries. Manufacturers are currently experiencing a strong recovery in orders, but they must also cope with a 50 to 100% increase in the price of raw leather since 2009.

"In a context where the price of raw materials often accounts for up to 50% of the production cost of the finished product and competitive pressure is particularly strong, companies in the leather markets have two key levers: material savings and productivity," declared Daniel Harari, Lectra CEO. "With its

CIMdata PLM Industry Summary

complete range of solutions for the leather cutting room, Lectra enables manufacturers to optimize their manufacturing processes-both for mass production and small runs. They can thus improve productivity and cut material consumption, while guaranteeing high-quality finished products. The permanent remote assistance and preventive maintenance plans included in Lectra's service contracts also contribute to the overall optimization of their cutting rooms."

A decisive step forward in nesting performance and material savings

Lectra's Leather Suite V3R1 software enables manufacturers to make concrete, measurable material savings of up to 3.5% in automated mode compared with the previous version. Optimized algorithms for nesting and placing difficult parts, coupled with significantly more intuitive and automated functions, makes for a major contribution in enhancing the overall performance of manufacturers in the leather industries. For example, an automotive subcontractor processing standard leathers in two 8-hour shifts, five days a week, with Lectra's CLS Auto leather cutter would see an additional EUR100,000 in material savings each year. The leather saved would have a particularly large impact on its production cost and a significant impact on its income statement.

Delivers the productivity and flexibility required by manufacturers in the leather industries

Regardless of the market, improving productivity in preparing leathers is a constant priority for manufacturers. With the new V3R1 software suite, the calculation time needed to work out the best marker has been reduced by 30%. This is due not only to the efficiency of the nesting algorithms, but also to the performance of the whole solution, which now has powerful new processors integrated into the systems that control the cutting machines.

Another new feature that should significantly enhance manufacturers' productivity is the integration of Lectra's new operating pilot software, which comes from a technology already available on the Vector ® range, into Lectra's leather cutting solutions. For the numerous companies working with separate equipment specific to leather or fabrics, this innovation will provide a more uniform experience of operating Lectra cutting machines. Any operator trained on Lectra's fabric cutting machines can easily work on equipment specially designed for leather, without switching to a new software environment. Leather industry manufacturers will now have a considerable advantage in terms of flexibility and versatility, enabling them to adapt easily to fluctuations in demand, while benefiting from new features that allow them to improve cut quality and enhance production performance.

An efficient solution for optimizing cutting room management and analysis

[Lectra's](#) V3R1 software suite also allows manufacturers to significantly improve the management and analysis of their cutting room performance through a completely revised reporting and monitoring module. This upgrade will not only enable them to analyze production data in depth, but also to check-prior to the cutting process-that supplier specifications have been followed (leather quality, production cost per type of supplier over different periods, etc.).

 [Click here to return to Contents](#)

LMS International and e-Xstream Partner on Composite Fatigue Analysis and Composite Simulation

10 March 2011

LMS International and e-Xstream engineering have started a strategic partnership to develop fatigue tools for random fiber-reinforced composites. Composite materials are increasingly seen as a viable alternative to conventional engineering materials. Besides being extremely lightweight, quasi-random

CIMdata PLM Industry Summary

fiber composites are easy to manufacture and offer numerous advantages compared to conventional metals. Although promising, using quasi-random fiber composite materials in structural parts is still limited because it is difficult to assess mission-critical performance issues, like durability.

“An accurate prediction of composite fatigue performance requires in-depth knowledge of fatigue and the anisotropic, heterogeneous and process-dependent behavior of composite materials. Combining our mutual expertise and software capabilities will add accuracy and predictability to the benefit of our common customer base” stated Dr. Roger Assaker, CEO of e-Xstream.

Until today, reliable and computationally inexpensive simulation methods for composite durability assessment were unavailable, making it difficult to realistically implement them into the digital design cycle. To overcome this, the combined LMS and e-Xstream tools and services bridge the gap between manufacturing simulation results and the prediction and improvement of composite fatigue behavior. This allows an integration of local material modeling, finite element calculations and fatigue prediction

“With e-Xstream, LMS has found an extremely innovative partner with the necessary knowledge, skills and complementary software products in material modeling,” said Stefaan Goossens, Vice President, Simulation Division at LMS International. “Combined with our 20 years of fatigue loads and simulation know-how, the partnership enables us to produce software solutions that are both accurate and efficient from the very start of our collaboration. Shortly, our customers will be able to confidently use innovative composite materials to produce lighter, more sustainable and eco-friendly products.”

An industry milestone, these solutions will premiere at the LMS European Vehicle Conference in May 2011 in Munich. More information: <http://www.lmsintl.com/events/lmsconferences/europe>



[Click here to return to Contents](#)

Mentor Graphics Announces Logic and Physical Synthesis Support for Xilinx 7 Series FPGAs

8 March 2011

Mentor Graphics Corporation announced that its advanced synthesis products support Xilinx 28nm 7 series field programmable gate arrays (FPGAs). Xilinx 7 series FPGAs are built on a low-power and unified FPGA architecture that scales across low-cost and ultra high-end families. Support for the new 28nm Virtex-7 and Kintex-7 FPGA families is available now and support for Artix-7 will follow. Mentor Graphics is the first EDA FPGA synthesis provider to offer physical synthesis support for Virtex-7 and Kintex-7 FPGA designs.

The push-button capabilities of the Precision® tool works in conjunction with the new Xilinx ISE Design Suite 13 to provide superior Quality-of-Results (QoR). Designers can also leverage the Precision tool’s support for SystemVerilog and mixed language support to implement their designs. During the implementation cycle, customers with large designs can reduce run time by utilizing the Precision tool’s automatic incremental synthesis and its integration with Xilinx SmartCompile.

Engineers from Xilinx and Mentor Graphics worked together to provide a smooth transition for customers migrating to the 7 series FPGAs. “Both teams worked jointly for the last several months to build on the success of our previous generation devices,” said Tom Feist, senior marketing director for ISE Design Suite at Xilinx. “With Precision’s physical synthesis support, mutual customers benefit from excellent quality of results for our next generation FPGAs.”

“Xilinx’s 7 series FPGAs address key requirements of higher capacity, faster performance and lower power for the new breed of FPGA designs,” said Daniel Platzker, product line director, Mentor Graphics

design and synthesis division. “Our joint effort resulted in our mutual customers achieving superior quality of results and fast design closure.”

About Precision Synthesis

The Precision Synthesis tool forms the centerpiece of the Mentor Graphics FPGA flow. It’s the only synthesis tool which offers true push-button, multi-vendor physical synthesis for achieving the best quality of results. With comprehensive language support, including SystemVerilog, advanced ASIC prototyping flow and automatic incremental synthesis, the Precision Synthesis tool is suited to handle today’s high-end FPGAs. The Precision Synthesis tool features design analysis capability, allowing designers to cross-probe between multiple views as well as perform interactive static timing "what-if" analyses. The Precision Synthesis tool reduces design iterations, and enables faster, more predictable completion of designs, while delivering high quality of results.

 [Click here to return to Contents](#)

Mentor Graphics Introduces Calibre RealTime for Instant Signoff Verification of Custom IC Designs

10 March 2011

Mentor Graphics Corporation announced the new [Calibre® RealTime](#) platform for signoff-quality [physical verification](#) during design creation. The first release provides instantaneous [design rule checking](#) (DRC) in the SpringSoft Laker™ custom IC design and layout solution, using the same Calibre decks as the signoff flow. The new solution improves design speed and quality of results by giving designers, for the first time, the full power of Calibre’s signoff engines and qualified decks during design. This allows them to optimize their layouts for performance without sacrificing manufacturing yield. A version for the Mentor® IC Station® custom design environment will be available in June.

“The new flow is seamless and virtually instantaneous, allowing our designers to use foundry-qualified verification information during design optimization in real time,” said Richard Rouse, Distinguished Engineer at MoSys, Inc. “The implementation fits naturally into the design flow so the learning curve is very fast. We were a bit concerned about the complexity of physical design at 28nm, but having the signoff DRC instantaneously available during layout, and not having to worry about consistency between the design tool DRC and signoff, has removed a lot of our concerns. We believe that we can save at least a week on a typical implementation project with this flow.”

Over the last 10 years, the design rule manual for a new technology has grown from a small pamphlet of dozens of pages into a grand tome with hundreds of pages. Design teams can no longer rely on their memory and manual checks to avoid design rule violations in their layouts. Design groups working at 32nm and beyond are in fact reporting a significant increase in the difficulty of converging to a high-quality layout that is completely DRC-clean.

“This is an exciting new capability for our mutual customers because it brings what used to be two different activities—design and verification—together to make the designer more productive. By eliminating iterations, data transfer delays, and ripple effects that are common when physical verification is left until later in the cycle, designers can get sign-off quality feedback in real time and shorten the overall design cycle,” said JT Li, VP of Physical Design & Technology Product Group at SpringSoft.

“Our designers are pushing the limits of the design rules to get the best analog performance,” said Ted Buchwald, a senior engineer at Mobius Semiconductor. “Having the signoff design rule checks in real

CIMdata PLM Industry Summary

time, while creating the layout, allows the designer to break the LVS-DRC-LVS loop. When a block is LVS-clean, it's DRC-clean and ready for extraction. It completely changes the layout-verification-simulation flow and lets us focus on getting the best results possible. The tool was clearly designed by someone with first-hand analog layout experience. In that it never seems to be in the way, but yet is always available to be used when and how the designer wants to use it."

"We are continuously improving the run times for all the products within the Calibre offering," said Joseph Sawicki, vice president and general manager of the Design-to-Silicon division of Mentor Graphics. "By making Calibre also instantly available in the design creation phase, we can short-circuit the divergence between design tool checking and signoff and make custom designers more productive."

 [Click here to return to Contents](#)

MSC Software Reseller Develops Productivity Tools for Compute Intensive Nonlinear Simulations using MSC Marc

8 March 2011

MSC Software Corporation announced that one of its business partners, IWF Engineering, has developed a set of automation productivity applications for nonlinear simulations using [Marc](#). The applications are developed and sold by IWF Engineering, a [reseller](#) of MSC Software products, and can be extended to work with [MSC Nastran](#) as well.

Marc is one of the leading solutions for implicit [nonlinear Finite Element Analyses \(FEA\)](#). In combination with the Mentat pre-/postprocessor, Marc offers a comprehensive solution for the analysis of highly complex nonlinear problems. Processing nonlinear jobs generally requires a considerable amount of time. To fully exploit the given hardware and software resources, time consuming calculation jobs are often processed in the evening hours or during weekends.

The goal of IWF Engineering was to create automation tools that enabled them to produce more analysis results in less time from long nonlinear simulation runs. It is not unusual for nonlinear jobs to terminate prematurely due to input errors or by reaching certain abort criterions. The definition of the input files for a FEM (Finite Element Method) program is quite an elaborate process especially for calculations with many variation parameters. For this reason IWF Engineering, an experienced [Marc](#) user, developed a set of automation applications to simplify tasks. The three independent but seamlessly chained tools include:

IWF DAT-File Value Change: Automated mouse-driven definition of DAT files for parametric studies. All numerical input parameters like loads, environment variables, material properties, geometries and breaking strains are taken into consideration. Up to 100 DAT files and equidistant values can be generated independent of preprocessors. Benefits include simple creation of new DAT file by parameterization and direct connection with IWF Launch.

IWF Launch: Mouse-driven creation of a task list of planned simulations and their processing during off work-times. The Marc call parameters for each selected input-file can be edited separately. Additional capabilities include execution of routines after termination of the program and output of a result protocol, notification via email with an enclosed result protocol, and easier error detection using integrated IWF Out-File Viewer. This tool acts as an Analysis Manager. Benefits include job queuing, emailing after completion, results protocols, and validation of completion codes.

IWF Out-File Viewer: Provides a listing of all error messages in the order in which they occurred. In

the complete file overview the occurred errors can be assessed. This instant feedback to user allows for quick response and more efficient analysis runs.

“Our tools were developed from years of simulation practice. We know from our own experiences how much effort is often necessary for the preparation of a comprehensive variation calculation. Errors can easily occur, terminate calculations and actually delay projects considerably,” said Uwe Großmann, founder of IWF Engineering. “The combined power of MSC Software’s offerings, including Marc and MSC Nastran, and our own automation tools provide our clients with speedy, accurate analysis.”

“[Marc](#) is a highly regarded nonlinear analysis solution used by product manufacturers around the world,” said Walter Simon, Senior Manager at MSC Software in Munich. “We are pleased to see our resellers providing first-rate sales and support for Marc and MSC Nastran while also developing their own tools to automate FEM calculations, giving customers even more speed and confidence in analysis.”

 [Click here to return to Contents](#)

New TurboCAD Pro 18 Significant Performance and Feature Additions

9 March 2011

IMSI®/Design announced the release of TurboCAD Pro 18 and TurboCAD Pro Platinum 18.

New and enhanced features include:

New High Performance Tools

GPU Accelerated Drawing Performance in Hidden Line, Draft Rendering, and Wireframe modes. Speeds drawing performance up to 60x faster.

Multi-Threading Support for both LightWorks® rendering and ACIS® solid modeling operations, taking advantage of multi-core processors so calculations are much faster.

Database Options. Extract attributes from Blocks & Xrefs.

Updated LightWorks Engine provides progressive, ray-traced rendering, improving workflow by generating fast estimates of images for early preview of light settings. Anti-aliasing for geometry and materials is also improved.

Updated D-Cubed™ DCM engine integrated into TurboCAD.

Multi-Select Drawings Command lets you open multiple drawings in one step.

Smarter, Faster Drafting & Detailing

PDF Underlay lets user import raster and vector PDFs and use as tracing layers with snaps.

Purge Tool keeps your drawing clean and optimized by removing unused objects and layers.

Ray Tool creates rays on the construction line layer to more clearly define your projection line guidelines. Construction lines are also now editable and can be converted in rays.

Copy In Place Tool works on all 2D and 3D objects.

Enhanced Layers. Includes improved layers dialog. Plus, improved ability to turn on/off layers per viewport.

CIMdata PLM Industry Summary

Improved Drafting Palette, Fillet (2D and 3D) Tool, Mirror Tool, Measurement, Text, Stretch Tool, and Trim Tool boost productivity.

More Robust Mechanical Tools

Graphic On Path Tool lets you place graphics on any given path, useful for laying out profiles for lofts or arranging graphics including lines, splines, circles, arcs, or ACIS edges for solids and surfaces.

3D Fillet Tool allows filleting of 3D polylines and works with the sweep and rigid sweep tools.

Assembly By Axis Modes. Three new modes make assemblies faster. Plus assembly tools now work with Xrefs and insertions.

Improved Sweep Tools and Simple Extrude Tool add more power to ACIS 3D modeling.

Pattern Tool applies 3D patterns 'On Polyline', so there are now six tools for the rapid creation of parametric patterns. (Platinum Only.)

Improved Pattern Tie lets patterns be associative with the object. Also, placement of objects along a curve on the surface will be normal to the surface. (Platinum Only.)

Updated Bend and Unbend Tools enhance control and precision. (Platinum Only.)

Improved Imprint Tools enhance precision design. (Platinum Only.)

Multi-Add Tool lets user select multiple objects to do Boolean additions. (Platinum Only.)

More Productive Architectural Tools

Dynamic Dimensions for Doors and Windows. Now dynamic dimensions display when doors and windows are inserted, showing the distance to and from the wall ends for easier, precise placement.

House Wizard automates the preliminary room-by-room design of an entire house and generates a floor plan.

Roofs and Walls Are More Intelligent. Tops of walls now automatically modify when changing a roof slope. You can also add different materials to various components (top, bottom, fascia, etc.) of a roof.

Block Attachments to Doors and Windows. Ability to attach block(s) to a Door or Window style. Design styles for these architectural object types are now practically unlimited. (Platinum Only.)

Programming & Interoperability

Ruby Scripting with console for writing either simple or advanced program scripts for architectural, mechanical, and engineering design automation. Language compatible with Google™ SketchUp™ Ruby scripts.

Updated File Filters including .DWG/.DXF filter enhancements for better AutoCAD® 2011 file sharing and an improved .SKP filter that now reads/writes up to Google SketchUp v8.

Network License Support. TurboCAD's Network License Management System allows for license compliance checking on network installations.

Enhanced Software Development Kit (SDK) with new samples and .NET support.

"We're particularly pleased with the help and feedback that we've gotten from our TurboCAD beta testers," added Mayer. "TurboCAD 18 has been a terrific community effort and we think the hard work and positive results clearly show in this product."

Availability and Pricing

TurboCAD Pro 18 is now available for \$1,295.

TurboCAD Pro Platinum 18 is now available for \$1,495. (For a limited time, receive the Hatch Pattern Creator plug-in with Pro Platinum 18 purchase, a \$125 value. Use it to create repeating patterns that can be used as Brush patterns in your designs.)

For a quick YouTube overview of some of the new features in TurboCAD v18, please visit <http://www.youtube.com/watch?v=1kJVoYtvLsM>.

For more information or to upgrade online, please visit www.TurboCAD.com or call IMSI/Design at 1.800.833.8082 (+1.415.483.8000).

 [Click here to return to Contents](#)

Siemens PLM Software's Parasolid and D-Cubed Components Power New Product from IronCAD

8 March 2011

[Siemens PLM Software](#) and IronCAD, Inc., a leading provider of design collaboration solutions, announced that IronCAD's new 3D Connector software, part of IRONCAD Draft, is now integrated with Siemens PLM Software's [Parasolid® software](#) and three [D-Cubed™ software](#) components for constraint solving and collision detection.

“The Parasolid and D-Cubed components have for many years been making critical contributions to the fundamental capabilities of IRONCAD®, our full feature 3D part and assembly modeling product,” said Cary O’Connor, Vice President of Marketing for IronCAD. “We’re delighted to be able to make further use of these components in IRONCAD Draft, allowing users to leverage constraint information from their 3D models in the context of a dedicated drafting and detailing tool.”

IRONCAD Draft is a 2D drafting tool with a new 3D integration capability enabled by 3D Connector. Leveraging its new integration with Parasolid, users can now import 3D model data – from suppliers, customers and colleagues – created with any software product capable of outputting the widely used Parasolid geometry format, such as IRONCAD or a wide range of third party applications. The data can be viewed, analyzed, rendered and referenced as the user produces drawings using the various 2D mechanical drafting functions in IRONCAD Draft.

In addition, any 3D models imported from IRONCAD can be repositioned under the control of any existing dimensions and constraints using Siemens PLM Software's D-Cubed 2D and 3D Dimensional Constraint Managers (DCMs). This allows the user to reconfigure a constrained model to meet the requirements of a specific 2D drafting or detailing task. Using the D-Cubed Collision Detection Manager (CDM) users can also quickly verify that new configurations do not result in colliding parts.

“IronCAD has been effectively leveraging our PLM Components for several years to help maximize the value they deliver to their customers,” said Joan Hirsch, vice president, Product Design Solutions, Siemens PLM Software. “With the deployment of Parasolid and various D-Cubed components in their new product, IronCAD has extended the use of our components across their product lines with minimum effort. The re-use of PLM Components enables innovative companies like IronCAD to rapidly and cost-effectively deliver new capabilities that create even more value for their customers. We are proud that the proven and flexible integration architecture of our high quality component software continues to provide benefits for all our customers.”

 [Click here to return to Contents](#)

Springsoft, Dongbu HiTek Release First in Series of Laker Process Design Kits to Streamline Custom Chip Design

8 March 2011

[SpringSoft, Inc.](#) and [Dongbu HiTek Co., Ltd.](#), a world leader of specialized foundry technologies and services based in South Korea, announced a multi-year partner program to jointly develop a series of process design kits (PDKs) that streamline implementation of custom chips with Dongbu's manufacturing technologies at mature process nodes. The companies also announced the release today of the SpringSoft Laker™ PDK for the Dongbu HiTek 0.18-micron BCDMOS foundry process with additional PDKs to follow throughout 2011.

This first foundry-qualified [Laker](#) PDK supports Dongbu HiTek's 0.18-micron BCDMOS process technology that enables chip designers to integrate high levels of power with analog control and logic functions, making it ideal for applications such as audio and motor control ICs, automotive SoCs, and LED driver chips. The PDK includes foundry-specific device symbols, highly optimized parameterized cells (PCells), pre-validated design rules and the latest technology files. When used with SpringSoft's [Laker Custom Layout Automation System](#), the PDK automates the physical layout of analog designs to maximize designer productivity and reduce development cycles. The Laker 0.18-micron BCDMOS PDK is immediately available online for Dongbu HiTek customers.

“Our BCDMOS processes are used in a broad range of leading-edge chip applications and vertical markets, and provide the basis for advanced analog and power control designs that can be optimized for performance or cost,” said Dr. Taek-Soo Kim, Vice President at Dongbu HiTek. “By combining our chip expertise with SpringSoft's custom design tools into Laker PDKs, foundry customers can now immediately access mature design automation and manufacturing technologies with a proven path to first-pass silicon success.”

“We've enjoyed a successful relationship with Dongbu HiTek as a user of Laker tools, and now we look forward to building on this as our teams collaborate to deliver PDKs that leverage their strength in specialized analog and mixed-signal foundry technologies. Together, we're making it easier for our mutual customers to design and manufacture custom chips that meet their cost, performance and time-to-market goals,” said JT Li, Vice President of Physical Design Product Group, at SpringSoft.

 [Click here to return to Contents](#)

Synopsys Announces FPGA Synthesis Support for Xilinx's Newest ISE Design Suite 13

8 March 2011

Highlights:

-- Designers using Synopsys' Synplify Pro® and Synplify® Premier FPGA synthesis software, in conjunction with Xilinx's latest ISE Design Suite 13, can achieve high design performance for Virtex®-7, Kintex®-7 and Virtex-6® devices.

-- The hierarchical design capabilities of the Synplify Pro and Synplify Premier software enable design methodologies to support team-design collaboration resulting in faster FPGA design development and increased efficiency.

CIMdata PLM Industry Summary

-- With Synplify Premier software's Fast-Mode, multiprocessing and automatic compile-points technologies designers can speed FPGA synthesis by up to 10X.

-- Synplify Pro and Synplify Premier software along with ISE deliver a jointly-developed Design Preservation flow, shortening design cycle time by avoiding re-verification of pre-verified blocks.

-- Symphony hierarchical High-Level Synthesis design methodology delivers optimized RTL code for multi-million gate designs that the Synplify synthesis tools use to achieve high quality of results for Virtex-7 devices.

Synopsys, Inc. announced [Synplify Pro](#), [Synplify Premier](#) and [Symphony](#) synthesis support for Xilinx's latest ISE® Design Suite (IDS) 13, which provides support for their 28-nanometer (nm) 7 series FPGAs. Synopsys' advanced [FPGA synthesis tools](#) include a hierarchical project manager that enables team-design collaboration with a mixed bottom-up/top-down approach that is highly integrated with Xilinx's SmartGuide incremental place & route (P&R) technology, delivering faster RTL-to-board implementation.

Symphony [high-level synthesis](#) creates optimized FPGA implementations for use with Synplify Pro and Synplify Premier software and includes integration features such as technology characterization, constraint generation for multi-rate, multi-clock implementations, and support for advanced device hardware such as multipliers, DSP units and memories. Together, the Synplify Pro/Synplify Premier design software and the Symphony High-Level Synthesis tools provide a comprehensive synthesis solution that helps eliminate months of time spent hand-coding RTL while reducing risk in large, multi-million gate designs.

The Synplify Pro and Synplify Premier design tools offer faster runtimes which are especially important for high-density designs. The Synplify Premier software's Fast-Mode enables up to 4X faster runtimes than normal logic synthesis, and when combined with multiprocessing, can achieve up to 10X faster runtimes. When used for [FPGA-based prototyping](#) projects, Synplify Premier software automatically converts the gated clocks, generated clocks and tri-states present in many ASIC designs into the target FPGA, making RTL code changes unnecessary. Synplify Premier software also includes extensive SystemVerilog language support and native support for [DesignWare® IP](#), which allows the same IP code used in the design to be available within the FPGA-based prototype.

Because of their close collaboration, Synopsys and Xilinx offer several optimized and integrated tool features. For example, Synplify Pro and Synplify Premier software and Xilinx's ISE Design Suite deliver a jointly developed Design Preservation flow, allowing users to iterate on targeted portions of the design while maintaining the performance of pre-implemented, pre-verified design blocks. The Synplify Pro software's integration with the Xilinx Embedded Design Kit (EDK) makes it easy for MicroBlaze processor users to include EDK generated components in their Synplify project.

"We have been working closely with Xilinx to provide best-in-class FPGA synthesis support for Xilinx's newest FPGA devices," said John Koeter, vice president of marketing for the Solutions Group at Synopsys. "The scalability, capacity and performance ranges of the 7 series FPGAs open up new applications for FPGAs. Using Synopsys' Synplify and Symphony software helps our mutual customers to take full advantage of these larger devices while improving quality of results, achieving faster time-to-market and lowering their design risk."

Designers using the Synopsys FPGA design tools get fast time-to-results for complex FPGAs, area optimization for lower part cost, power reduction and incremental and team-design capabilities for faster

CIMdata PLM Industry Summary

FPGA deployment. Synopsys FPGA design tools include [Synplify Pro](#) logic synthesis, [Synplify Premier](#) advanced FPGA implementation and [Identify®](#) integrated RTL debugger. Synopsys FPGA design tools provide additional value by offering [DesignWare® IP](#) support, links to high-performance [VCS®](#) functional verification solutions, integration with [Symphony C Compiler and Symphony Model Compiler](#), and an ASIC-compatible synthesis flow for [FPGA-based prototyping](#).

Availability

Synplify Pro, Synplify Premier and Symphony software support for Xilinx's latest ISE Design Suite 13, including support for their 28-nm 7 series FPGAs, is available now. For more information on Synopsys' FPGA Implementation products visit <http://www.synopsys.com/fpga>. For more information on Xilinx's 7 series FPGAs, please visit <http://www.xilinx.com/7-series-fpgas.htm>



[Click here to return to Contents](#)