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Acquisitions

Autodesk to Acquire ALGOR, Inc.

17 December 2008

Autodesk, Inc. announced that it has signed a definitive agreement to acquire ALGOR, Inc., a leading provider of analysis and simulation software, for approximately \$34 million.

Headquartered in Pittsburgh, Pennsylvania, ALGOR's computer aided engineering software is used for product design and development in the automotive, aerospace, medical, consumer products, defense, energy and utilities industries. The acquisition will strengthen the Autodesk solution for [Digital Prototyping](#) with new advanced simulation functionality, including multiphysics, mechanical event simulation and fluid flow.

"Autodesk strives to offer manufacturers the most comprehensive and easy-to-use Digital Prototyping solution on the market," said Robert "Buzz" Kross, senior vice president of Autodesk Manufacturing Solutions. "The acquisition of ALGOR will add significant new capabilities to virtually test and predict the impact of simultaneous real world conditions like heat and pressure on product designs."

"Since 1976, ALGOR's accurate, easy-to-use analysis and simulation tools have helped mechanical engineers make better, safer products at a lower cost," said Michael Bussler, president and founder of [ALGOR](#). "We have enjoyed a long-standing partnership with Autodesk, and the combination of our proven technologies will be an exciting new chapter for our customers worldwide."

Product Integration

ALGOR's software and services enable complex simulations on products ranging from mobile phones and printer cartridges to oil pipelines. Following the acquisition, Autodesk customers will have the opportunity to perform even more sophisticated analysis based on real-world structural and thermal conditions, allowing mechanical engineers to make informed product development decisions.

Upon completion of the acquisition, Autodesk's current intent is to integrate ALGOR into its Manufacturing Solutions business unit and to continue developing and selling ALGOR's core product

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line. Autodesk plans to continue developing the ALGOR products with an open approach, allowing direct data exchange between ALGOR products and multiple computer aided design software offerings. The transaction is subject to customary closing conditions, and is expected to close in the fourth quarter of fiscal 2009.

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Autodesk to Acquire BIMWorld

15 December 2008

Further enhancing its portfolio of solutions for building information modeling (BIM), Autodesk, Inc. announced that it has signed a definitive agreement to acquire substantially all of the assets of BIMWorld, a privately-owned business specializing in the production and distribution of branded BIM content for building product manufacturers.

Terms of the acquisition were not disclosed.

Autodesk plans to combine BIMWorld with Autodesk Seek, its online source for building product design information that allows architects and engineers to search, select and specify building products directly from their design applications. Autodesk Seek is a search-based Web service available in the 2009 U.S. versions of Autodesk's Revit-based software applications for BIM, as well as AutoCAD, AutoCAD Architecture and AutoCAD MEP software. Autodesk Seek is also available through standard browsers at <http://seek.autodesk.com>.

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BlueCielo Further Strengthens Brazilian Operations

18 December 2008

[BlueCielo ECM Solutions](#) announced that as per January 1, 2009, it will acquire all BlueCielo-related activity of the company's distributor SKA Automacão de Engenharias Ltda and reseller GAMA – Soluções em Gerenciamento Eletrônico de Documentos Ltda, both based in São Leopoldo, Brazil. GAMA's founder and director Gerson Fioravante will become BlueCielo's Director Marketing and Sales for Brazil.

This transfer of activity is BlueCielo's second step to forming strong, regional operations for the BlueCielo organization in Brazil and the rest of Latin America. This move follows BlueCielo's recent acquisition of a 49 percent stake in another Brazilian reseller PONTODOC Soluções de Gerenciamento Ltda (now renamed BlueCielo do Brasil Soluções de Gerenciamento Ltda).

Twelve GAMA staff members with extensive experience in implementing BlueCielo's InnoCielo software suite will join BlueCielo do Brasil as of January 1, 2009. With complete dedication to the sale and support of BlueCielo's product portfolio since 1995, GAMA is BlueCielo's largest reseller in Brazil with over 50 percent market share. GAMA's clients include companies such as the Americas' largest long steel producer Gerdau Ameristeel, world's biggest alumina producer Alunorte, significant oil producer Petrobras and world-leading producer of bleached eucalyptus pulp Aracruz Celulose.

The transfer of distribution activities will give BlueCielo more direct access to its clients and allow long-time distributor SKA to focus entirely on its main products and services in CAD, CAM and CAE.

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BlueCielo will continue the active support of its remaining resellers in Brazil.

“There is an increasing demand for our best-of-class ECM solutions in our key verticals Oil and Gas, Mining, Process and Utilities in Latin America,” states Martijn Janmaat, BlueCielo’s CEO who has been the driving force behind the formation of BlueCielo do Brasil’s operations. “BlueCielo’s strategic aim is to build our already-strong customer base and further increase our presence in the region. Merging the relevant activities of [GAMA](#) and [SKA](#) with our Brazilian office will further strengthen and expand our operational infrastructure and market presence, plus enable customers to benefit from direct access to BlueCielo expertise.”

“Latin America is a huge marketplace, full of opportunities for companies able to provide the best solutions in ECM with best practices and implementation services. GAMA’s success with the InnoCielo software suite in the region over these 13 years proves that BlueCielo’s solutions meet the particular demands of this niche market and have huge growth potential,” says GAMA’s founder and director Gerson Fioravante, who will serve as BlueCielo’s Director Marketing and Sales for Brazil. “We’re delighted to become part of the BlueCielo family and help strengthen its operations in Latin America. Direct access to BlueCielo and its expert global resources will bring our customers an even higher level of support and service.”

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CIMdata News

CIMdata Extends the Opportunity to Vote in Our Opinion Poll on Your PLM Hosting Environment

December 2008

We have extended the opportunity to vote in our opinion poll on your PLM hosting environment until the end of December. But don’t wait until then. Take a moment now to vote [here](#).

The results of these polls are tabulated as you vote. The results are completely anonymous.

If you have a suggestion for a poll you'd like to see contact us at info@cimdata.com.

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Company News

Altair Adds DSHplus from FLUIDON to its HyperWorks Enabled Community

16 December 2008

[Altair](#) announced the addition of the DSHplus suite from [FLUIDON](#), a leader in simulation of fluid power systems, to its HyperWorks Enabled Community (HWEC), bringing the total applications available under the HyperWorks platform to 46, including 18 third-party software solutions. HyperWorks customers can now download the latest version (V3.6) of DSHplus View and Solve, along with all other available applications, at zero incremental cost using their existing HyperWorks software license system at <http://www.hyperworkscommunity.com>.

"Being part of the HyperWorks Enabled Partner Program gives FLUIDON the opportunity to provide its simulation tools to the HyperWorks community worldwide," said Dr. Heiko Baum, managing director,

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FLUIDON GmbH. "The program brings Altair into a position to offer best-in-class solutions for various applications in addition to the HyperWorks suite. Particularly in simulating mechatronic systems and in the area of fluid power applications, FLUIDON is complementing Altair's offering."

With the addition of DSHplus, Altair continues to provide its customers with more software options to diversify and increase their return on investment in HWEC, and gives third-parties the opportunity to gain added exposure and marketshare.

"The biggest advantage is for the user, who has access to a broad range of simulation products to cover almost every application needed at no additional cost. Joining the partner program therefore leads to a win-win-win situation, for the customer, for Altair, and for us," added Dr. Baum.

DSHplus offers various state-of-the-art interfaces to support a stand-alone fluid power system development and to enable a convenient model preparation and exchange for a mechatronical simulation approach.

HyperWorks is a suite of enterprise analytic applications that includes statistical, database, visualization and simulation software to help companies make better business decisions. Its patented on-demand computing licensing technology allows users to transparently share software licenses globally across a broad suite of applications. With the HyperWorks Enabled Community, Altair is extending the HyperWorks Platform from 28 internally developed solutions to more than 40 with the addition of new third-party ISV applications like DSHplus. Customers can operate all applications under their existing HyperWorks software licenses, increasing flexibility and the value of their investment.

In addition to DSHplus, popular third-party enterprise analytics applications already available for download in the HyperWorks Enabled Community (<http://www.hyperworkscommunity.com>) include DesignLife from nCode, FEKO from EMSS, FEMFAT from Magna, SC/Tetra from Software Cradle, CFD++ from Metacomp, HiQube and solidThinking.

"DSHplus is very complementary to Altair's MotionSolve and its addition to the HWEC allows us to expand our multi-body dynamics offering," said Michael Humphrey, Altair vice president of partner programs. "Since the launch of the program this summer, we have received applications from more than 250 of our HyperWorks customers. This robust adoption validates the tremendous power and value of the HyperWorks Enabled Community, which provides our clients with access to a growing suite of third-party software for little or no incremental cost, at a time when controlling software spend is critical."

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CYA Technologies Expands Global Footprint

18 December 2008

[CYA Technologies](#) announced that it has expanded its global footprint by entering into partnership agreements with Docbyte, IT Magic Solutions, and WindowLogic. These leading enterprise content management (ECM) solutions and service providers are now authorized and trained to represent, deploy and support CYA's complete portfolio of ECM recovery solutions.

These new partnerships provide CYA with an expanded presence in EMEA via Docbyte of Belgium, which is focusing on local government institutions, and IT Magic Solutions, which is serving Germany, Switzerland and Austria. CYA extends its presence to the Pacific Rim with the addition of WindowLogic, based in Australia. These three companies join CYA's growing list of international

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partners, which includes Acando, Atos Origin, CROC, doculation, Tieto, and others.

The three new partners will be offering ECM customers CYA's full range of solutions, which include:

- **CYA SmartRecovery™**: Application-aware solution providing hot, synchronous backups of ECM repository information. Safeguards organizations against logical information loss by enabling one, several, or thousands of lost or corrupt objects to be restored back into the repository in their original state without taking applications offline.
- **CYA Recycle Bin™**: "Un-delete" tool enabling ECM end users to instantly restore documents, folders, and virtual documents they have accidentally deleted from the content repository.
- **CYA SmartReplicator™**: Hardware-independent solution providing real-time replication of the information within an ECM production repository to a standby server.

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Invention Machine Adds S&T Croatia to its Growing Reseller Network

16 December 2008

Invention Machine announced that it has signed a reseller agreement with [S&T Croatia](#) to market Invention Machine [Goldfire® Innovator](#) in Croatia. S&T joins Invention Machine's [list of resellers](#) to help meet the demand for its [innovation software](#), worldwide. S&T Croatia is part of S&T Group, a leading provider of IT consulting, solutions and services to customers in Central and Eastern Europe as well as Japan and China.

S&T's first Goldfire Innovator customer is the [University of Zagreb](#). The university's Faculty of Mechanical Engineering and Naval Architecture will adopt the innovation software to train students so they are well prepared to participate in different aspects of planning, designing, implementing and operating systems, including products, processes, and projects.

"The task of modern engineering education is to help students adopt state-of-the-art technology, be socially responsible and innovative," said, Dorian Marjanovic, vice dean, Faculty of Mechanical Engineering and Naval Architecture University of Zagreb. "Therefore extending our engineering education with new computer aided innovation tools like Goldfire Innovator should enable our students to become better innovators as they join the workforce."

Under the terms of the agreement, S&T will promote and sell Goldfire Innovator in Croatia and provide ongoing technical support to customers, from pre-sales to implementation and beyond.

"This collaboration between Invention Machine and S&T will set the standard for sustainable product innovation in Croatia, increasing our value-add to customers," said Krešo Galić, director, Information Systems, S&T. "Together we will help companies create a more efficient innovation infrastructure that will accelerate product development as well as support universities to develop world-class innovators."

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Kanagawa Technical School Selects Dassault Systèmes CATIA for its 3D CAD and Modeling Course

16 December 2008

Dassault Systèmes ([DS](#)) announced that Kanagawa Prefectural Eastern Region Vocational Technical School (Kana Tech College), a major engineering school under the Kanagawa prefecture, has selected

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the CATIA Academic License, for its mechanical design course on 3D CAD.

Kana Tech College, which opened in April 2008, is one of the largest engineering vocational schools in Japan. The school's 3D CAD & Modeling Course is one of the most popular among all the 15 courses being offered by the school. Admission to the course is difficult as the competition is five times higher compared to other courses. Kana Tech College teaches students design and production processes; therefore, proposing practical 3D design training is critical for the school.

"Our school believes in teaching mechanical design, including not only basic design but also applied design skills, which are important for our students to find good jobs", says Mr. Daisuke Taniguchi, general manager of 3D CAD & Modeling Course, Industrial Engineering, Kanagawa Prefectural Eastern Region Vocational Technical School. "We selected CATIA because it provides powerful free surface modeling capabilities that are critical for applied design. The students who followed this course have been recruited by leading automobile and electronics companies all over Japan."

"It is a pleasure for Dassault Systèmes that Kana Tech College selected CATIA to educate the new generation of 3D CAD engineers," says Nicholas Calfacacos, managing director, Dassault Systèmes Japan. "By providing advanced design capabilities through our software to educational institutions, we are contributing to the creation of great products and shaping the future of Japan. DS solutions were implemented through a collaborative effort between DS and Ryoyu Systems Co., Ltd., a DS value-added reseller in Japan."

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LMS Partners with von Karman Institute for Fluid Dynamics

12 December 2008

LMS announced a partnership with the Brussels-based von Karman Institute for Fluid Dynamics (VKI). This collaboration will promote joint research, technology and development projects and consultancy activities in aero-acoustic modeling and testing. It combines LMS' numerical vibro-acoustics simulation and data acquisition expertise and VKI's wind-tunnel testing, measurement techniques and flow phenomena modeling know-how.

VKI's knowledge of environmental and applied fluid dynamics, wind technology, measurement techniques and flow phenomena simulation will help LMS develop and validate new methods and software technology. LMS' expertise in the field of numerical vibro-acoustics and data acquisition technologies brings considerable value and application knowledge to VKI research projects. Formalizing a five-year collaboration in acoustics and fluid dynamics, the joint LMS-VKI association will focus on consultancy projects and research and development activities in aero-acoustics and fluid-structural interaction for both simulation and testing applications. In the aero-acoustics field, these activities cover heating, ventilation and air-conditioning projects, whereas fluid-structural interaction applications are useful in wind noise transmission research.

"VKI started research activities in aero-acoustics more than a decade ago, mainly combining experimental and theoretical approaches. Our cooperation with LMS helped us to efficiently and quickly launch Computational Aero-Acoustics (CAA) activities thanks to the LMS acoustic solver techniques and our expertise in computational fluid dynamics. I am sure that the LMS-VKI partnership will strongly support industrial customers in the aero-acoustics field. The VKI educational program has already benefited from our partnership. Our students are being trained using the LMS software," stated Jérôme Anthoine, aero-acoustics group leader at VKI.

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LMS Engineering Services and VKI are already working together on joint consultancy activities for energy production, steel, HVAC systems, gas distribution and ground, air, and rail transportation.

In terms of research and development, LMS and VKI have recently invested in a high-performance computing facility, comprising 48 nodes in a SGI Altix 1U rack-mounted server with 12 quad-cores Intel Xeon 2.5 GHz (96 Gb RAM and InfiniBand) to support its shared research projects. This facility, located at the VKI, can be remotely accessed and has already been used by the research team in the European research projects, SIMVIA2 and AETHER.

"Our partnership with the von Karman Institute is a strong asset for LMS. LMS has been investing in flow process engineering solutions for over 5 years now. Combining our expertise with the well-recognized range of experimental and numerical competences of the VKI will foster a strong alliance for aero-acoustics and fluid-structural issues as well as a strengthened joint research and development capacity," commented Christophe Schram, project leader research, technology and development at LMS.

About von Karman Institute:

The von Karman Institute for Fluid Dynamics, founded in 1956, is an international non-profit organization for post-graduate education and research in fluid dynamics. The VKI permanent staff totals about a 100 people, who are spread over 3 departments: Aeronautics and Aerospace, Environmental and Applied Fluid Dynamics, Turbomachinery and Propulsion. The research and training activities are carried out combining experimental, theoretical and numerical approaches, and comprise aeronautical as well as non-aeronautical flow applications for industrial purposes. VKI has a large number of advanced experimental facilities; a total 43 wind tunnels and test rigs, ranging from low speed to hypersonic flows, as well as industrial facilities. Experimental research is complemented by an important activity in the domain of Computational Fluid Dynamics (CFD) which now covers more than 1/3 of the research activities. Three clusters of multi-processor computers are available. Many of the research activities carried out at the VKI are supported by research contracts with industry, governmental or international institutions.

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New AVEVA Asia Pacific Vice President of Marketing Appointed

18 December 2008

AVEVA announced the appointment of Matthew A. Cuerdon to the position of Vice President of Marketing for AVEVA Asia Pacific. This is in-line with the company's efforts to significantly increase penetration of its solutions within the region, and particularly its AVEVA NET solutions for lifecycle information management.

Cuerdon, with 27 years of industry experience joined AVEVA Asia Pacific in early 2008 as Manager-Business Development Industry Solutions (Plant) Asia Pacific, will set marketing directives to ensure the growth of AVEVA in Asia Pacific.

Peter Finch, President, AVEVA Asia Pacific, said:

"Matthew's appointment is very timely, as we push to expand our market share of core engineering and design solutions, and ramp up our AVEVA NET business in the region. To date, AVEVA NET is being implemented in shipyards and plant engineering companies in China, Japan and Malaysia, with new wins coming from Indonesia and Australia.

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"Matthew will be invaluable to us: prior to joining AVEVA and whilst working in a partner company, he maintained a close 15-year association with AVEVA, and consequently knows our solutions range well. I am confident that Matthew will help us fortify our position as a leader in the industries we serve."

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New IBM Initiative to Help Business and IT Leaders Achieve Greater Value From Software Investments

17 December 2008

IBM unveiled an initiative to help organizations reduce costs and improve the efficiency of their information technology (IT) and product engineering teams. To help companies overcome the challenges associated with today's rapidly changing and global business climate, IBM's new offerings will empower companies to use their software as a strategic business asset.

Organizations too frequently waste valuable time, money and resources by failing to ensure software and systems projects meet business requirements prior to delivering them to the marketplace. Even if business objectives are clear, most companies experience a serious gap in the ability of IT to execute against these goals. With 62% of projects failing to meet deadlines, 49% of projects suffering budget overruns and 41% failing to deliver on expected business value or return on investment (ROI)*, software and systems projects are not providing the level of return of investment required by today's businesses.

For example, if an automobile manufacturer is forced to recall a significant number of cars due to defects in the software, or a large organization reports a loss due to problems in its ERP system, they are wasting valuable time, money and resources that could have been saved by ensuring their software and products met business requirements prior to marketplace delivery.

To help address these challenges, IBM is announcing new software enabled by [Jazz](#), IBM's collaborative technology platform, to help companies balance the rising cost of IT operations with the need to generate results with fewer resources. To derive greater value from their software investments, companies must collaborate across geographical and organizational boundaries, automate work flow based on up-to-date information and continuously report progress against desired business outcomes. These new offerings will help transform how business leaders and IT organizations work together to:

- Act quickly to seize new business opportunities by analyzing ROI scenarios, the impact of change and the alignment of business and technology investments which are key to successful business transformations;

- Achieve precision in desired business outcomes by building consensus among business and technology leaders and by making better decisions based on accurate and real-time information;

- Execute with reduced risk and cost, delivering higher quality solutions and improved IT and product engineering efficiency through real-time team collaboration, automation and reporting.

"Historically, when companies have looked for ways to reduce costs, they have often overlooked the importance of assuring that information technology is efficient," said John Lutz, general manager, Managed Business Process Services, IBM Global Technology Services. "In today's rapidly changing economic climate, organizations must drive business and product differentiation with greater agility and confidence. This 'agility at scale' will be crucial to the future of many businesses."

New and enhanced software facilitates collaboration and business transformation

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The challenges of globalization and technology outsourcing are forcing companies to become more nimble, using an increasingly geographically dispersed, virtual and agile workforce to remain competitive. In the world of software delivery, this means around the clock collaboration to improve the success rate of software projects. IBM's Jazz technology platform helps geographically dispersed teams collaborate to improve business processes and align business and IT priorities.

[IBM Rational Requirements Composer](#) -- new software that helps business and IT teams partner to deliver business differentiation and improve the business results tied to their investments in software. Built on Jazz, IBM Rational Requirements Composer helps geographically distributed teams work together in an open, real-time and transparent manner to more effectively define the scope of a project and build consensus among business and IT leaders.

[IBM Rational RequisitePro](#) -- enhanced software that tightly integrates with [IBM Rational Software Architect](#) to ensure delivered solutions meet business requirements and priorities.

[IBM Telelogic System Architect](#) -- enhanced software that helps business and IT teams work together to prioritize investments to support business goals and seize new business opportunities by visualizing, analyzing and communicating enterprise blueprints of business and technology architectures. Integration between Telelogic System Architect and IBM Rational Software Architect links strategy, processes and IT infrastructure planning directly with solution and system implementations. [IBM Telelogic System Architect XT](#), the System Architect web client, includes new, out-of-the-box templates that improve how business and IT information is captured and consolidated, making the data more visually appealing to CTOs and business leaders. In addition, new web-based dashboards provide executives with the insight about IT projects they need to quickly seize new business opportunities.

[IBM Rational ClearQuest](#), [Rational Build Forge](#), [Rational Asset Manager](#) and [IBM Rational ClearCase](#) - a collection of enhanced software which improves team productivity and the ability to execute against desired business and technical requirements at lower cost and risk. With new collaboration, automation and reporting features taking advantage of Web 2.0 and Jazz technologies, customers can more easily implement software delivery best practice processes, helping them deliver higher quality solutions and improved IT efficiency. Organizations can now achieve better visibility into projects and provide traceability across the software supply chain using around the clock global monitoring.

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Synopsys and STMicroelectronics Accelerate 32-Nanometer Readiness Delivering Optimized Standard Cell Library and Route-Rule Validation in IC Compiler

18 December 2008

[Synopsys, Inc.](#) announced early results of its 32-nanometer (nm)-centric joint collaboration with STMicroelectronics. The two companies have a close ongoing collaboration to establish all the necessary components for a successful 32-nm design flow, including STMicroelectronics' standard cell library for low power and high-performance design, and the support of the latest route rules in Synopsys' IC Compiler Zroute technology. Zroute's architecture and state-of-the-art routing algorithms are important to meeting the 32-nm technology requirements while delivering the best quality of results.

The collaboration makes STMicroelectronics the first company to pre-qualify and deliver state-of-the-art libraries internally for the high-k metal gate 32-nm low power International Semiconductor Development Alliance (ISDA) process, based on Synopsys' IC Compiler. This has enabled STMicroelectronics to begin implementing a complex Digital Signal Processor (DSP) core test chip,

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which in turn will allow validation-in-silicon to be carried out on a complete set of low power solutions for the ISDA process in the second half of 2009.

"As a joint development partner of the ISDA, STMicroelectronics stays at the forefront of advanced process technology development," said Philippe Magarshack, group vice president at STMicroelectronics' Technology Research and Development (R&D). "Since early on, we have worked closely with Synopsys to enable the readiness of key components in our 32-nm design flow. Synopsys' ability to quickly support the evolving 32-nm route rules in IC Compiler's Zroute technology enabled us to validate our standard cell library routability and optimize it for the highest density. The availability of the first standard cell library is a key achievement towards 32-nm readiness."

For library development, STMicroelectronics used the Synopsys Cadabra® product. For route rule development, the chosen vehicle was Zroute technology in Synopsys' IC Compiler, developed from the ground up to address emerging design and design-for-manufacturing (DFM) challenges at advanced process nodes. Zroute's architecture can support advanced design rules and at the same time meet aggressive performance targets. In addition, Zroute's native multi-threading support takes advantage of the latest multi-core computing systems to deliver near-linear scalability of runtimes. For extraction and time analysis of the library, STMicroelectronics is using Synopsys' Star-RCXTM and PrimeTime® golden signoff tools.

"STMicroelectronics has been a long time, valued customer, actively collaborating in new technology development to help guide the direction of our products," said Antun Domic, senior vice president and general manager of Synopsys' Implementation Group. "The latest achievements in 32-nm design enablement are examples of our close collaboration bearing fruit. Zroute technology in IC Compiler provides a critical component at the right time to meet the needs of the 32-nm transition. We are committed to continuing our collaboration with STMicroelectronics towards the final objective of a production-ready environment for high-quality 32-nm design."

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Ylva Berg new CEO of Technia

15 December 2008

Ylva Berg has been appointed CEO of [Technia](#) AB, business area manager for Product Lifecycle Management at the Addnode Group, and member of Addnode's Group Management. She will assume her position in March 2009. Ylva Berg has worked in various marketing and managerial positions in international operations and has a broad industrial background.

Since 2006, Ylva has been Senior Vice President Market Operations and Business Development and member of BE Group's Executive Management. Ylva Berg has been a Board member of Addnode AB since 2007 and in conjunction with her new duties as business area manager, she will resign from Addnode's Board of Directors.

"When selecting the CEO of Technia and business area manager for Product Lifecycle Management at the Addnode Group, we looked primarily for someone with extensive expertise in sales and marketing and experience in establishing and managing operations in new markets in an international environment. Ylva's background and qualifications matched these requirements and will be highly beneficial in the further development of the Product Lifecycle Management business area in the Nordic region and internationally," says Staffan Hanstorp, President and CEO of Addnode.

“The current CEO of Technia, Hans Wolfhagen, will manage operations until Ylva Berg takes up her duties in March 2009. Thereafter, Hans will continue as Director Business Operations and be a key part in the development of the operations,” continues Staffan Hanstorp.

Ylva Berg has extensive experience from international operations in such companies as Tetra Pak Inc. and Beloit Millpro Europa. From 1999 to 2005, Ylva was General Manager of the Trade Council in Copenhagen.

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Events News

Delcam to Host Second GTMA Emerging Technologies Event

18 December 2008

Delcam will host the second GTMA “Emerging Technologies” event at its Birmingham headquarters on 4th February, 2009. Like the previous event held in February this year, the meeting will include presentations on a range of new manufacturing technologies. These will include developments in rapid prototyping, technology roadmapping, surface treatment, sheet forming, 3D imaging, cutting tools for composites and mouldmaking.

The 2008 event attracted over 100 delegates and a similar number of attendees are expected next February. These included representatives from both SMEs and OEMs. Steve Hebdon, senior development manufacturing engineer, BAE Systems, commented after attending: “Points of contact gained have proved to be very valuable and have led us to follow up on a number of new technologies and possible future production methods.”

“In addition to the formal presentations, we will be encouraging networking among the delegates so that they can gain even more from their day,” said Scott Phillips from the GTMA. “A series of ‘Hot Desks’, where a variety of experts will be situated during the networking periods, will give the chance for companies to discuss their individual needs.”

“The day will give delegates an opportunity to learn more about the new and emerging technologies within manufacturing that could provide their companies with a competitive edge,” claimed Mr. Phillips. “Knowledge gained from the event should be useful to decision makers so that sound strategic decisions concerning new technologies can be made, while more junior staff can benefit by having the chance to tap into the knowledge of the experts that will be presenting.”

For further information and to register for the event, please contact Leisa Goldsmith at the GTMA on 01844 274222 or e-mail admin@gtma.co.uk.

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Delcam to Present More Efficient Manufacturing Workshop at Autosport

16 December 2008

Delcam will present a workshop on more efficient manufacturing on the opening day of the Autosport Engineering exhibition to be held at the NEC, Birmingham, on 8th and 9th January. The workshop will outline computer-aided manufacturing techniques that offer huge benefits to autosport companies seeking to reduce costs, increase productivity, improve quality and shorten delivery times.

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The presentation will include a series of case studies showing how these benefits have been achieved in applications as diverse as engine port machining and composite part manufacture. While Delcam remains best known in the autosport sector as the supplier of inspection software to the FIA and NASCAR, the company also supplies manufacturing systems to many of the leading teams and subcontractors in the industry.

One example will be Crosby Composites. Since switching to Delcam's software, the company can produce composite components to levels of accuracy rarely seen in the industry. Owner Paul Crosby now uses this ability to finish machine every part to tolerances between 0.1 and 0.25mm as the key differentiator for his business.

The latest addition has been Delcam's On-Machine Verification software. The first set of seventeen components produced with this system was supplied to one of the F1 teams and fitted onto the car with no clashes or re-work. It was the first time in the team's history that this had happened with any set of composite parts from any supplier.

Another long-term Delcam partner is the Zytec Group, one of the world's leading specialists in automotive control systems, race engine design and development, powertrain development, and hybrid-electric vehicles. The two companies have worked together to develop novel machining strategies for motorsport engine manufacture, in particular for the finish machining of inlet and exhaust ports.

"Since we began using the Delcam software to program our five-axis machines, we have reduced our manufacturing times by more than half, with a typical reduction for port machining down from forty hours to fifteen hours," claimed John Manchester, Operations Director at Zytec. "Similarly, we have reduced the machining time for our barrel throttles by 60% and increased the accuracy of the match to the inlet ports."

For details and registration forms for the Autosport Engineering seminars, please go to http://www.the-mia.com/events_diary.cfm/flag/2/e_id/183.

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Sescoi Brings Further Productivity Software to Indian Toolrooms

11 December 2008

Over 100 engineers and technicians attended the Indian launch seminar of SESCOI's new high-speed collaborative viewer WorkXPlore 3D. Taking place in Nasik, Maharashtra at the end of November, companies represented included Mahindra & Mahindra, Nash Group and Kimplas Piping Systems Ltd.

SESCOI is already known in India for its automatic CAM/CAD system WorkNC, whose users include companies such as the ARRK Corporation and Bharat Forge. SESCOI is now bringing further productivity tools to the Indian market with the launch of its new WorkXPlore 3D software that has been especially designed for mold, die and toolmakers. The software enables collaborative working, allowing the sharing of design data from a wide range of sources in one single, easy to use, application. This has the benefit of reducing the requirement for companies to run and finance multiple CAD software systems.

Large, and even very large, CAD models and drawings can be imported from all the main CAD systems and then combined, manipulated and analyzed, speeding up and optimizing the design process. Critical parameters, such as part interference, surface curvature, dimensions and draft angles can be reliably checked. WorkXPlore 3D allows all those involved in the product design chain to collaborate, enabling the user company to capitalize on a range of skills, reach the best solution in the shortest time and avoid

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costly errors.

At the launch event, Sescoi demonstrated the capabilities of the three versions of WorkXPlore 3D: Viewer, Collaborative and Manufacturing Pro. The latter, with its range of specialist tools, drew the most interest from the engineers at the seminar. These include the import of native CATIA V4, CATIA V5 and UGS files, advanced functionality for detecting flat surfaces, dynamic collision checking and point cluster control. WorkXPlore 3D Manufacturing Pro's capabilities will simplify the process of checking and evaluating designs and provide vital information relating to manufacturing methods. This will help companies to improve their product quality and reliability, and facilitate machining and assembly operations.

A free download of WorkXPlore 3D, which allows the use of the Manufacturing Pro version for 30 days and after that unlimited use of the Viewer version, is available on <http://www.workxplore-3d.com>.

Sescoi's WorkPLAN Enterprise ERP and MyWorkPLAN job management solutions, which are creating significant interest amongst Indian toolrooms, were also presented at the seminar. These solutions offer Indian custom manufacturers a range of functions for job management (quotations, job tracking,..) through to full ERP (including planning and simulations, purchasing and stock, time, quality and performance management..).

One of the first Indian companies to testify to the multiple benefits of the MyWorkPLAN solution is Jyoti Tooling in Pune. According to Jyoti's CEO, Mr Nityanand, improvements in machine utilization rates have already justified his investment in MyWorkPLAN and the solution has enabled the company to meet virtually all agreed delivery deadlines, helping it towards the achievement of its 100% customer satisfaction target.

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SoftInWay Has Announced Its Turbomachinery Design Educational Events for First 6 Months of 2009

18 December 2008

SoftInWay Inc. announced a schedule of its educational events related to turbomachinery flow path design, analysis and optimization for first six months of 2009.

The program starts by 1-day introductory seminar AxSTREAM – Software System for Design, Analysis and Multidisciplinary Optimization of Turbomachinery Flow Path that will take place in Yebisu Garden Place Tower (Tokyo, Japan) on January 27. During the seminar SoftInWay will demonstrate the features of AxSTREAM, introduce the latest innovations in the software and discuss the specifics of progressive axial and radial turbomachinery design nowadays. The main goal of this concise educational course is to help attendees increase efficiency of turbomachinery, rapidly design/redesign an optimized flow path and minimize costs using AxSTREAM and multiple advanced options it provides.

Those who want to get more from AxSTREAM and move from theory to practice will be able to visit SoftInWay interactive workshops on design, analysis and optimization of axial/radial turbine and compressor which will be held in Boston, Massachusetts, February 24-26, and in Orlando, Florida, June 5-7. The training will enable participants to get a deeper insight into the AxSTREAM capabilities and take advantage of its features, to name just a few, the Streamline Solver performing flow path calculations in meanline (1D) and axisymmetric (2D) formulations, embedded Design of Experiment Engine providing multiparametrical optimization etc.

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Besides, in Winter/Spring semester SoftInWay offers special discounts for colleges and universities, so that students of engineering faculties can develop their professional skills and raise turbomachinery design technologies worldwide to a new level.

More detailed information about [AxSTREAM education programs](#), schedule and registration is available on the company's website.

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SolidWorks World 2009 to Feature Exciting Keynotes, Success Stories, and Learning Opportunities

17 December 2008

The founder of Virgin, one of the most respected brands in the world. The chief executive of DS SolidWorks. A member of the team that delivered 3D CAD to Windows. Household-name companies recounting how they overcame their biggest engineering challenges.

All of this plus professional development, networking, and first-rate entertainment are on tap for SolidWorks World 2009 (<http://www.solidworks.com/pages/swworld09/index.html>), taking place Feb. 8-11, 2009, in Orlando, Fla.

“SolidWorks World improves every year as we incorporate attendee suggestions into the program,” said Efrat Ravid, director of marketing and alliances of Dassault Systèmes SolidWorks Corp. (DS SolidWorks). “As a result, we’re packing more luminaries into the keynotes, more content into the general sessions, and tailoring break-out sessions more closely to the challenges designers and engineers face every day.”

DS SolidWorks CEO Jeff Ray will officially kick off SolidWorks World 2009 by detailing past and future commitments to customers. He will also spotlight customers who are “changing the world” amid unprecedented challenges and opportunities.

Ray will go on to introduce Special Guest Speaker Sir Richard Branson, founder of the [Virgin Group](#), consisting of more than 200 companies – from airlines and luxury properties to financial services and mobile phone service providers – employing over 50,000 people in 30 countries and recording more than \$20 billion in 2006 revenues. Branson also applies his business expertise on environmental and social problems with Virgin Unite, his not-for-profit entrepreneurial foundation.

Day 2 dawns with an exploration of how the most well-known brands in the world confronted their biggest design challenges. Keynoter Jon Hirschtick, co-founder and group executive of DS SolidWorks, will help engineers tell their stories. Hirschtick is credited with bringing 3D CAD to the desktop.

On Day 3, attendees will get a sneak preview of SolidWorks® 2010 3D CAD software, featuring a host of new and improved capabilities, along with associated solutions for data management, analysis, and documentation.

SolidWorks World 2009 also offers:

- more than 150 in-depth training sessions;
- a Product Design Showcase of breakthrough inventions and exciting designs by SolidWorks customers;
- more than 100 hardware and software solutions that complement SolidWorks software in the Partner Pavilion;

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- a special event on the “wild side of Disney,” Disney’s Animal Kingdom® Theme Park. Attendees will come face to face with wild animals, ride the Kali River Rapids®, race down Forbidden Mountain™, and explore lush jungles (plus food, drink, and entertainment);
- and additional surprises throughout the week.

Register today

A full conference pass is \$995 with a \$100 early bird discount through Jan. 9. Attendees can save more by sending three people from the same company for the price of two full conference passes. For more information, visit <http://www.solidworks.com/swworld>.

SolidWorks World 2009 is produced by DS SolidWorks.

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Financial News

IQS Reports Fourth Consecutive Double Digit Growth

10 December 2008

IQS is reporting its fourth consecutive year of double-digit growth with 37% revenue growth for fiscal year ending September 30, 2008.

“Over the past four years we’ve honed our business strategy and executed marketing and sales programs that have enabled us to achieve consecutive growth figures,” said Michael Rapaport, President and CEO of IQS, “Highlights of this year’s growth are a 40% increase in deal flow, and a 50% increase in software maintenance revenue. This tells us that not only is IQS’ quality solution and message of value resonating with new clients, but IQS continues to provide value for our existing clients as well.”

[IQS](#) is well poised for growth, despite the economic downturn – and perhaps because of it. In 2008, IQS conducted a study: IQS: Savings Through Quality. The study showed that an IQS quality implementation was a strategic weapon in cost cutting, optimizing organizational efficiency and eliminating bottlenecks to growth. The study showed an average, tangible, first year savings from an IQS implementation was \$3.8MM per company. For information on the study, go to the Download Section of the IQS website at <http://www.iqs.com>.

Why is IQS such a strong performer in uncertain times? “We make sure we are delivering value to clients every day, and we work with our clients to articulate success and savings in a way that is easy to understand. Too many people think of quality as a reactive tactic. Those who work with IQS understand that it is clearly a proactive strategy for cost reduction, and organizational improvement,” says Lori Gipp, Vice President of IQS. For years quality has been the bastion of the Quality Managers and Quality Directors. More recently, C-Level executives, and in particular financial managers are taking note of the value quality is delivering in their organization.

Says CFO Bret Kastein of Pointe Precision, a provider of precision CNC machining solutions to the aerospace and high-performance automotive market, who participated in the study: “Not only do we view IQS as a competitive tool, but we also view it as a sales tool to large aerospace companies. We have the ability to sit down and walk through IQS to visually show prospective customers how we handle a business process. Everyone walks away totally amazed and feeling completely confident that Pointe Precision can deliver.”

Contact: Lori Gipp, Vice President of Marketing, 440-333-1344, lgipp@iqs.com

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Implementation Investments

AspenTech Software Used by Process Manufacturing Industry to Combat Global Warming

15 December 2008

Aspen Technology, Inc. outlined how engineers and researchers across industry, academia and government are using its aspenONE CO₂ capture simulation software to fight global warming. The CO₂ capture models within the aspenONE Process Engineering software are accelerating efforts to meet the increasing adoption of government reduction mandate requirements, while supporting clean energy development.

Current users of the CO₂ capture models include the Research Institute of Innovative Technology for the Earth (RITE), The Massachusetts Institute of Technology (“MIT”), University of Texas at Austin, Cansolv Technologies, American Electric Power, Rentech and others.

AspenTech’s CO₂ capture models allow cost-effective design and optimization of manufacturing processes that separate CO₂ before it is emitted. By neutralizing the impact of this gas, process manufacturers can better achieve their operational excellence goals through environmental regulation compliance, and gain a competitive advantage.

Most recently, AspenTech released out-of-the-box modelling functionality for coal gasification, bio-fuels, and other alternative energy sources in its new aspenONE V7 Process Engineering solution suite.

Recently implemented state-led initiatives such as the Regional Greenhouse Gas Initiative (RGGI) and others such as the Western Climate Initiative (WCI) and the Midwestern Greenhouse Gas Accord (MGGA) are designed to establish the nation’s first mandatory, market-based solution to reduce greenhouse gas emissions.

Following the European Union’s Emissions Trading System (ETS) model, US states are expected to cap emissions output and sell allowances through auctions. Proceeds from the auctions are intended to support the development of renewable energy and other clean technologies and foster innovation in the clean energy economy to create green jobs.

AspenTech has been a leader in the development of alternative energy modeling tools since the late 1970s, when a coal gasification modeling project of The Massachusetts Institute of Technology funded by the US Department of Energy resulted in the founding of Aspen Technology. Since then, government, academia and process manufacturing companies have actively used AspenTech’s engineering modeling solutions to address and optimize energy management and alternative energy initiatives.

Supporting Quotes:

Randall Field, Executive Director - Conversion Research Program, MIT Energy Initiative

“Using AspenTech’s software we are able to identify and analyze innovative ways to reduce the parasitic energy loads and costs associated with carbon dioxide capture. With the help of advanced modeling solutions in aspenONE we are well-equipped to investigate, innovate and assess alternative technologies for driving down carbon dioxide emissions while supporting the broader issues of energy

security and energy costs.”

Supporting Resources:

Links to more information:

- [Designing Emerging Energy Processes](#)
- [Region Greenhouse Gas Initiative](#)
- [Western Climate Initiative](#)
- [Midwestern Greenhouse Gas Accord](#)
- [Greenhouse Gas Technology Conference](#)
- [aspenONE V7](#)

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Cochlear Sets Quality Standard with Dyadem

18 December 2008

Dyadem has announced that Cochlear Limited, an industry leader in hearing implant innovation, is using software from Dyadem to enhance and standardize its quality assessments. Dyadem’s FMEA-Med, a software solution that helps automate compliance reporting, enables Cochlear to link risk and quality assessments, and to set a new standard in quality for its hearing implant solutions. Cochlear’s solutions enable thousands of hearing-impaired to improve their range of hearing and live fuller lives.

FMEA-Med is a software solution that delivers industry-standard Failure Mode and Effects Analysis (FMEA) reports for medical device and pharmaceutical manufacturers. The FMEA methodology improves quality and prevents potential flaws in hardware design and manufacturing processes in a variety of industries. Dyadem’s FMEA-Med helps manage Quality Lifecycle Management processes, and was built to reflect the unique standards and operating environments of the medical device industry. This is essential to an industry that is regulated heavily, and where poor product quality has unique consequences.

With sites in both Australia and Sweden now using FMEA-Med, Cochlear is able to standardize its risk assessments and risk rankings, allowing it to keep track of specific FMEA studies and compare the design and production processes for all implant components. “Previously, different terminology and risk rankings were used across various departments and components, making it difficult to accurately compare and link DFMEA (Design FMEA) and PFMEA (Process FMEA) studies,” said Anna Windevall, Manufacturing Operations Engineer, Cochlear Bone Anchored Solutions in Sweden. “With Dyadem’s FMEA-Med, Cochlear can now link and share studies across departments and sites, making it much easier to implement a company standard of quality based on comparable and accurate risk rankings.”

Previously using a basic spreadsheet for its studies, [Cochlear](#) quickly found that the cumbersome documentation and inability to link studies made for a frustrating assessment process. Since implementing FMEA-Med, Cochlear has been able to more easily show management where investment dollars should be allocated, allowing it to remain the market-leader in its industry and ensuring that its high standard of quality remains consistent.

“Cochlear’s commitment to quality is one of the reasons it has remained an industry leader,” said Kevin North, President and CEO of [Dyadem](#). “Medical device companies have traditionally had challenges ensuring consistency and accuracy in their risk assessments, but with our Quality Lifecycle Management solutions, we have given the industry a legitimate opportunity to address this. Cochlear is proving how easy it is to create quality products, be on the cutting edge of technology, and improve competitiveness and productivity, all at the same time, and without compromise.”

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Jaeger-LeCoultre Adopts PTC Product Development Solution to Improve Its Watch Development Process

16 December 2008

[PTC](#) announced that Jaeger-LeCoultre, the Swiss subsidiary of Richemont International S.A. has adopted the PTC® Product Development Solution including, Pro/ENGINEER®, Mathcad® and ProductView™ to develop its entire product portfolio of watches and clocks. Jaeger-LeCoultre will use Pro/ENGINEER for 3D digital modeling, machining, and simulation, ProductView for 3D visual collaboration between various departments, and Mathcad® for performing and documenting engineering calculations. Today, PTC's solutions contribute to the success of Jaeger-LeCoultre products. The clock and watchmaker also plans to implement PTC’s Arbortext® content publishing system to manage its technical documentation.

Founded 175 years ago and located in the heart of Swiss Jura, Jaeger-LeCoultre's 1,100 employees design and manufacture luxury clock and watch products, including the famous Reverso and Gyrotourbillon watches, and Atmos clocks. Jaeger-LeCoultre stands apart from its competitors with its guarantee of 100% Swiss design and manufacture. Because of this guarantee, Jaeger-LeCoultre does not have outsourcing as an option to strengthen its product development process and must instead rely solely on superior quality and high precision products.

Designed for a very discerning clientele, Jaeger-LeCoultre luxury watches and clocks have historically had multi-year R&D and finalization processes. But with quick time to market being a major customer demand, and key imperative for watchmakers, Jaeger-LeCoultre sought to gain an advantage by using PLM technology. The company decided that the main goal for implementing a PLM solution set would be to develop increasingly sophisticated and complex products more simply and quickly, and thus to widen its product catalogue. In fact, Jaeger-LeCoultre ultimately decided to implement a PLM system because it would allow them to simultaneously decrease the design process time while still encouraging the innovation and high quality that distinguishes its products.

Jaeger-LeCoultre has also turned to PTC to implement a collaborative design method with a wider, faster and more reliable form of data sharing. All involved – project managers, engineers and purchasers – can now work on the same project simultaneously, without the risk of conflict or error.

“It is highly rewarding for PTC when luxury product companies such as Jaeger-LeCoultre, whose principals are 'precision' and 'product quality,' are able to use PTC solutions to increase efficiencies in their product development process without sacrificing their high quality and innovation standards," said Marc Diouane, senior divisional vice president of PTC Europe.

About Jaeger LeCoultre

A major player in watchmaking history, Jaeger-LeCoultre is celebrating its 175th anniversary this year..

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The Manufacture has an impressive range of world firsts, legendary models to its credit, including the Reverso, the Duoplan, the Master Control, the Memovox Polaris, the Gyrotourbillon I and the Atmos. In 2008, around 1000 people mastering over 40 watchmaking professions and over 20 cutting-edge technologies will continue to pay tribute to the pioneering spirit of the House founders by creating new masterpieces in harmony with the grand watchmaking tradition. In 2010, pursuing the multiple extensions around Antoine LeCoultre's original workshop, Jaeger-LeCoultre will welcome a new building providing 9,000 square metres of additional workshops.

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OptiTex and [TC]2 Enhance Software for Bra Manufacturer

16 December 2008

OptiTex has implanted a new extension for reading OBJ geometry from [TC]2's new "avatar from 3D scan" feature in response to its customer Tulips. Tulips is a Belgian based company with a production facility in Asia that specializes in custom made lingerie with high standard fabrics.

"OptiTex has always prided itself on being responsive to the needs of our clients," states Ran Machtinger, President and CEO of OptiTex, Ltd. "Our remarkably user-friendly software is an outgrowth of our broader customer-friendly approach, and we're very pleased to expand our software to accommodate valued customers such as Tulips who want to leverage the OBJ reader to add different types of avatars."

Tulips uses a [\[TC\]2](#) NX-16 3D body scanner at their Belgian Facility to obtain personalized body measurements and asked OptiTex to add the new OBJ geometry reader to its software. OptiTex not only augmented Tulips' software; OptiTex will also include it in its standard default import/export format files list in its cutting-edge 3D Runway Designer. OptiTex has supported customers using 3D body scanners and [TC] 2 technologies since 2005.

"We are fortunate to have partnered with such a responsive company as OptiTex," says Frank Indigne, Managing Director of Tulips. "Using 3D Runway Designer not only helps us design the most elegant, sensual lingerie on the market, it helps us save money by eliminating fabric waste and speeds our time to market to finally produce a unique perfect fitting bra."

"We are not only the CAD software of choice of leading names such as Hugo Boss and Tommy Hilfiger, but we also play a supporting role in the creation of fine undergarments," concludes Machtinger. "We've basically have every aspect of design covered from head to toe."

Comments Dr. David Bruner, [TC]2's VP of Technology Development, "we are very pleased that Tulips is the first apparel company, and OptiTex the first CAD company, to showcase our new high fidelity avatar from body scan feature with their customers."

About Tulips Lingerie

Brussels, Belgium is a new player in the luxury lingerie world, which produces custom and perfect fitting lingerie through 3-body scanning and a high tech production. For more questions please contact us at info@tulips-lingerie.com

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Pole Zero Goes Live on IFS Applications in Seven Months

16 December 2008

IFS has announced that Pole/Zero has gone live on IFS Applications enterprise resource planning (ERP) software in only seven months.

Pole/Zero's West Chester, Ohio location is now live and running IFS Applications Financials, Human Resources, Sales & Support, Engineering, Manufacturing and Distribution components. It also has future plans of implementing IFS' CRM module in 2009.

[Pole/Zero](#) designs and manufactures radio frequency products that are used in military applications. It began the search for an ERP system because its legacy system could not handle the company's plans for rapid growth, and the system required many additional custom software packages to fulfill all its business needs. In order to streamline its systems and increase productivity Pole/Zero turned to IFS Applications.

"The use of IFS Applications will allow us to disseminate information faster, reduce our paper use, and make our approval processes more efficient," Pole/Zero IT Manager Jeff Miller said. "This integrated system will reduce duplication of data entry and simplify maintenance of our now centralized data. Additionally, our new ability to attach supporting documentation to objects within IFS Applications conveniently puts essential documentation just a few clicks away."

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Semcon Chooses Dassault Systèmes PLM Solutions to Reduce Response Time to Customer Requests

16 December 2008

Dassault Systèmes ([DS](#)) and, Semcon/IVM Automotive Brasil, specializing in end-to-end automotive development, today reaffirmed their partnership and announced the purchase of additional CATIA virtual design software seats. IVM expanded its CATIA implementation to address its growing demand for customized, faster, and more responsive production.

Specializing in the end-to-end development of vehicles, including electrical and electronic systems, engines, transmissions, chassis, design, bodywork, interiors, structural calculations and simulations, samples, prototype building and testing, Semcon/IVM Automotive Brasil sees great growth potential on the Brazilian market, expecting to close 2008 with 30% growth.

"The evolution of the sector, the new requirements of Brazilian consumers and the consequent needs of Brazilian and international manufacturers, besides the stiff competition in the country, have driven the entire supply chain to anticipate market requests, such as shorter time-to-market," said Renato Perrotta, executive director of Semcon/IVM Automotive Brasil.

For Semcon/IVM Automotive Brasil, investment in technology is needed to keep the company up-to-date and competitive, and serve the new businesses that arise all the time as the automotive industry heats up and keeps breaking records. In Brazil, the company is one of the automotive industry's largest engineering and development partners, developing projects for large OEMs, along with serving automotive systems providers and suppliers.

"The time needed for the development of an automobile, for example, has been reduced from 48 to 30 months in different assemblers in the country," said Michael Zemlenoi, territory manager, Brazil, Dassault Systèmes. "Virtual prototypes and performance mock-ups are becoming a standard practice in

this industry. They reduce costs, increase time-to-market and productivity and, one of the most important benefits, allow a manufacturer to increase the safety of the final product.”

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Waseda University Uses PTC Pro/ENGINEER to Develop a “Human-Symbiotic” Robot

15 December 2008

PTC announced that Pro/ENGINEER®, PTC’s parametric, integrated 3D CAD/CAM/CAE software, has been selected by Waseda University’s Sugano Laboratory as the main engineering tool for the development of a human-symbiotic robot. In fact, Pro/ENGINEER was able to address one of the most significant challenges in the project related to the cabling design for robotic joints.

The human-symbiotic robot called “TWENDY-ONE” is a jointly researched and developed by Sugano Laboratory (headed by Professor Shigeki Sugano, Department of Modern Mechanical Engineering, Waseda University) and private-sector businesses. Professor Sugano is well known for his research in the area of arm and finger manipulations. In 1999, his team developed “WENDY” (Waseda ENgineering Designed sYmbiont), a human symbiotic robot that had “dexterous” hands with human-like fingertips and succeeded in breaking an egg flawlessly for the first time in the world. Professor Sugano’s team made full use of Pro/ENGINEER to develop “TWENDY-ONE,” a prototype of the new generation human-symbiotic robot being developed based on the “WENDY” technology for supporting daily human activities.

The project team used the Pro/ENGINEER Piping and Cabling Extension, which enables users to define cable properties parametrically and to find optimal routes automatically. Because more actuators and sensors are required to enhance the robot’s capability, the team had to increase the number of cables. Additionally, as the team deploys higher-output actuators, thicker cables had to be introduced, making cabling design a major challenge in developing high-performance robots. “TWENDY-ONE” has a large number of sensors and actuators all over its body, which inevitably requires many cables and advanced engineering techniques. But with the advanced cabling capabilities of Pro/ENGINEER, the project team succeeded in generating accurate cable routings just by specifying certain points on the cable routes and also in updating the cable design automatically when changes were made.

“We must be very careful about the appearance and the materials used when we design the outer shell of a human-symbiotic robot because the robot should never hurt the humans or the surrounding environment on its contact,” says Professor Sugano about the design requirements enabled by the Pro/ENGINEER Piping and Cabling Extension. “Also, the appearance is very important from an affinity standpoint. Exposing many cables outside the robot’s body shell could create major problems, and therefore, we must place all cables inside the shell. Furthermore, cables must be compact in order not to interfere with moving parts. We could use piping or solid models to define cable models, but with the specialized cabling capabilities in Pro/ENGINEER, we can define the properties of the cables and create cable models while we see how the cables behave.”

“When a cable route is updated based on a design change, the cable often sticks out of the allowable space. Pro/ENGINEER gives me that information immediately,” says Yohei Uemura, a second-year mechanical engineering master’s program student. “The tool also enables us to perform mechanical and cabling designs concurrently while graphically viewing the orientations and locations of the circuit boards and their relative positioning. Also, cables can be ordered accurately since accurate lengths of the cables can be obtained. We were actually able to assemble the ordered cables with little deviation, just

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like I viewed in the CAD tool. That was extremely impressive.”

“Pro/ENGINEER Piping and Cabling Extension has been enhanced and refined over the years to increase the ease of use and breadth of cabling design capabilities,” says Michael Campbell, senior vice president, Product Management, PTC. “With the ability to define cable properties as parameters, Pro/ENGINEER enables users to update cable models automatically when there is a change, and therefore, cabling and mechanism designs can be performed seamlessly. Regarding the “TWENDY-ONE” project, Waseda University’s Sugano Laboratory members were able to fully utilize such capabilities of Pro/ENGINEER and develop an innovative humanoid.”

“TWENDY-ONE” photos:

* Human Symbiotic Robot "TWENDY-ONE"

<http://www.ptcjapan.jp/pr/TWENDY/TWENDY-ONE-Default.html>

* Hand & Arm having Original Passive Mechanisms

http://www.ptcjapan.jp/pr/TWENDY/Arm_ClosedShot.html

* Human Mimetic Multi-finger Hand with Distributed Tactile Sensors

http://www.ptcjapan.jp/pr/TWENDY/Hand_ClosedShot.html

* Backpack equipped with Controllers

<http://www.ptcjapan.jp/pr/TWENDY/TWENDY-ONE-ErectBackView0.html>

* An Example of Dexterous Manipulation "Straw Handling"

<http://www.ptcjapan.jp/pr/TWENDY/TWENDY-ONE-StrawManipulating0.html>

* Kitchen Tool Manipulation for Cooking Support

<http://www.ptcjapan.jp/pr/TWENDY/TWENDY-ONE-SweetsPickingUp1.html>

About “TWENDY-ONE”

“TWENDY-ONE” is a humanoid (height: 146.7cm, weight: 111kg) being developed for physical care and other purposes in a human-symbiotic environment, formerly introduced as WENDY (Waseda ENgineering Designed sYmbiont) in 1999. The robot is placed at the top of the field as the one that integrates hand and fingertip manipulators and other technologies at a very advanced level. The project has also attracted some attention from an educational point of view, as it gives the opportunity for students to learn the technology while nurturing a dream and gain some understanding of product development. For more information about “TWENDY-ONE,” please visit http://twendyone.com/index_e.html.

About Waseda University

Waseda University is one of the top private universities in Japan celebrating the 125 anniversary from its founding by Shigenobu Okuma in 1882, with 16 departments, 23 graduate courses, 2 affiliated high schools and an art school as well as libraries, research institutes and research centers. It has approx. 50,000 undergraduate students and more than 500,000 graduates. Waseda University is devoted to the promotion of global education collaborating with 387 universities in 76 countries.

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Window Manufacturer Uses SolidWorks Software To Shield Customers from Hurricanes

10 December 2008

Ensuring doors and windows hold up and protect the human beings behind them is why Lawson Industries of Medley, Fla., uses SolidWorks® 3D CAD software and SolidWorks Simulation software to design its Hurricane Guard® product line.

In Florida and other hurricane hot zones, doors and window are truly “engineered” products that require manufacturers to submit sealed drawings, stress calculations, and lab reports to local permitting agencies before selling a new product. For years Lawson relied on AutoCAD® software because of the need to submit drawings to the Miami-Dade product control review office.

The company recently realized, however, that SolidWorks 3D CAD software automatically generates drawings while improving design speed, automation, accuracy, and problem-solving. With the help of authorized SolidWorks reseller The SolidExperts, Lawson set up its SolidWorks software to create new door and window designs in order to expand its product line choices for the large residential developers that place the vast majority of orders.

“Once the parametric product models are set up, we simply type in two numbers, length and width, and SolidWorks does the rest of the work with its parametric evaluation of the model equations and configuration tables,” says Thomas Sotos, engineering manager for Lawson Industries. “The program develops a new set of drawings instantly, cut sheets for the factory floor, raw material quantities for cost calculations, and visuals the marketing folks love. It’s a great feeling, because we know the SolidWorks model is a mathematically accurate representation of what we are actually building on the floor.”

According to Sotos, the company can now bring a concept to prototype about five times faster than with AutoCAD. It has reduced errors by 75 percent since 3D visualization –especially using sectional views – enables engineers to see and correct errors early in the design process. SolidWorks’ 3D capabilities have cleared the way to new products, such as a three-point door lock mechanism, previously too difficult to design efficiently in AutoCAD.

SolidWorks Simulation software has reduced Lawson’s spending on expensive lab tests because it helps the company be confident every product will pass the first time through. “SolidWorks is basically a virtual prototype machine,” says Sotos. “SolidWorks stress analysis software predicts what happens in the lab, so now we do one lab test for confirmation instead of four tests for trial and error, saving in the neighborhood of \$15,000 on each product. We can extensively test the product both technically and aesthetically, even before we cut any dies or order metal for prototypes.”

[Lawson](#) relies on authorized SolidWorks reseller [The SolidExperts](#) for ongoing software training, implementation, and support.

[SolidWorks](#) and SolidWorks Simulation are products of Dassault Systèmes SolidWorks Corp. (DS SolidWorks).

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Product News

Agilent Technologies Announces Breakthrough in X-Parameter Nonlinear Model Generation for Components Used in Wireless, Aerospace Defense Industries

17 December 2008

Agilent Technologies Inc. announced a breakthrough nonlinear modeling technique for components such as amplifiers and transistors that are commonly used in the wireless and aerospace defense industries. The X-parameters can be generated either from simulation with the company's Advanced Design System (ADS) EDA software or from Agilent's test and measurement instruments, for faster communications-product development.

In the past, designers could not accurately measure, display and simulate the full amplitude and phase information of each spectral component in nonlinear designs. They also did not have access to a highly accurate nonlinear behavioral model that fully characterizes and describes the nonlinear behavior of their devices. Now, X-parameters make it simple to capture nonlinear behavior with the same ease and accuracy as measuring or simulating linear S-parameters. Agilent's new patent-pending X-parameter technology allows designers to capture the nonlinear behavior of active components such as amplifiers and transistors and save them in transportable RF intellectual property for use in RF system or circuit designs in ADS.

"Literally in five minutes, you can generate a nonlinear X-parameter model from an off-the-shelf amplifier by measuring it with Agilent's Nonlinear Vector Network Analyzer (NVNA), and you can start doing nonlinear designs with it in ADS immediately," said Jason Horn, R&D engineer with Agilent's High-Frequency Technology Center, and one of the inventors of X-parameter technology.

Advanced Design System enables X-parameter nonlinear model generation from simulation, allowing design houses to create nonlinear X-parameter models of their RFIC and MMIC; power amplifier modules (PAMs); front-end modules (FEMs); and multiport devices such as mixers. This allows RF and microwave system designers to fully characterize systems early in the design cycle and before the hardware is fabricated. X-parameter models protect the intellectual property from which they are generated while retaining the full nonlinear characteristics to share with circuit and system design partners. This technology helps save time and speed products to market all along the design chain.

"System integrators can quickly simulate X-parameter RF modules and provide fast feedback to component suppliers before hardware is committed," said Jack Sifri, product marketing manager with Agilent's EESof EDA division. "This represents a potential design-house savings of at least \$1 million in reduced IC foundry turns and development costs, along with months of savings in development cycle time. Early beta customers representing key IC design houses and handset manufacturers are enthusiastically embracing X-parameters. The X-parameters provide a compact language with which to communicate and simulate nonlinear characteristics accurately with full IP protection."

Users can also generate X-parameter models with load pull characteristics -- for accuracy over a wide range of terminating impedances -- from ADS simulation or from measurement on an Agilent NVNA using the load-pull system from Maury Microwave Corp. With load-pull X-parameter models, designers can accurately simulate and optimize critical transceiver and power amplifier specifications such as cascaded output power, power added efficiency, error vector magnitude and adjacent channel power ratio, eliminating months of prototype iterations with off-the-shelf components.

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For more information about the Advanced Design System and X-parameters, visit <http://www.agilent.com/find/eesof-x-parameters>.

To request a demo and get more information about X-parameters, visit <http://www.agilent.com/find/eesof-x-parameters-demo>.

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Atrion International Joins IFS Global Software Partner Program to Provide Product Compliance Across the Entire Product Life Cycle

15 December 2008

Atrion International announced that it has joined the [IFS](#) Global Software Partner Program. Under the terms of the partnership agreement, Atrion's Product Compliance solution can be integrated with IFS Applications to provide IFS customers with dynamic regulatory content, software applications, and services that automate and streamline product compliance across the entire Product Life Cycle (<http://www.atrionintl.com/productlifecyclesolutions.html>).

IFS and Atrion have been collaborating for several years on a case-by-case basis. The integrated solution is a proven offering with many successful implementations for such notable companies as Akzo Nobel and Becker Acroma. Atrion's integration of product compliance and technological expertise provides a strategic business process that addresses changing regulatory requirements imposed on formula-based process industries. Atrion's solution makes it easy to follow and stay up-to-date with legislative requirements such as the control, labeling, and classification of chemicals - from the development stage through to sales.

The combined IFS/Atrion solution will provide customers with dynamic regulatory content, applications, and services which integrate product life cycle compliance into their ERP systems (<http://www.atrionintl.com/erpbasedsolutions.html>), making the processing of material compliance information easier, automated, and streamlined. Other terms of the agreement include support from IFS integration specialists, as well as joint participation in the sales, marketing initiatives, and IFS events.

IFS' industry-focused solutions are optimized for ERP, EAM, and MRO. "Through working with partners like Atrion International, we are able to offer our customers a wider choice of business functionality and enable them to become more agile," said Ulf Annas, Solution Partner Director at IFS. "It is possible for us to collaborate closely with our software partners as IFS Applications is based on a service-oriented architecture into which partners' components can easily integrate."

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Autodesk Expands BIM Software Offering for Structural Analysis

15 December 2008

Autodesk, Inc. has announced the addition of two new structural analysis software offerings to expand its range of building information modeling (BIM) solutions. Aimed at structural engineers, and based on technology acquired by Autodesk from Robobat, Autodesk Robot Structural Analysis 2009 software and Autodesk Robot Structural Analysis Professional 2009 software are tightly integrated with Revit Structure 2009 software for BIM. The new software enables structural engineers working with Revit Structure to more seamlessly analyze complex structures.

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"The new Autodesk Robot Structural Analysis Professional 2009 delivers a great value to structural engineers worldwide by incorporating BIM in the structural analysis and design of building, civil and other specialty structures," said Nicolas Mangon, structural engineering business line manager, Autodesk AEC Solutions. It is designed to be collaborative, faster and more versatile. This in turn will help to provide structural engineers with the ability to do analysis and design better by creating digital models that visualize, simulate and analyze their work.

Autodesk Robot Structural Analysis and Autodesk Robot Structural Analysis Professional complements the Revit Structure 2009. Autodesk customers will experience a more seamless integration of a complete BIM solution, from the analysis of structures through to design and construction.

Autodesk Robot Structural Analysis Professional provides a scalable analysis solution. It is multiregional, incorporating over 15 languages and addressing over 60 design codes for the structural engineer to analyze many types of structures, including buildings and bridges, as well as civil and specialty structures. Structural analysis features include advanced automeshing and modeling capabilities, faster dynamic solvers, and integrated reinforced concrete design and structural steel design modules.

Enhanced Collaboration and Workflow

Autodesk Robot Structural Analysis Professional provides structural engineers with versatile interoperability that enhances collaboration with architects and other disciplines, thus helping to improve project workflow.

Embracing BIM, Autodesk Robot Structural Analysis Professional incorporates a flexible user interface with 3D collaboration and bidirectional links between Revit Structure, AutoCAD Structural Detailing 2009 and Revit Extensions to help simplify communication and collaboration across project phases and extended teams, which can help to save time and reduce errors.

Faster Calculations

Powerful analysis with strong finite element automeshing capabilities provides a faster means for tackling the most complex simulations and model calculations. Autodesk Robot Structural Analysis Professional can produce faster results in minutes versus hours, with nonlinear and dynamic algorithms for the most demanding and complex structures. As a result, engineers can more easily analyze different design analysis alternatives and make early improvements to the way their projects look and perform in the real world.

Versatile Interoperability

Through an open API (application programming interface), Autodesk Robot Structural Analysis Professional delivers a versatile, scalable and country-specific analysis solution for many types of structures, including buildings and bridges as well as civil and specialty structures. It can be integrated with other applications in the project workflow and provides the capability to produce plans in one country and language and then easily convert them into another.

Availability

Autodesk Robot Structural Analysis 2009 and Autodesk Robot Structural Analysis Professional 2009 are now available. For more information, visit <http://www.autodesk.com/robot>.

About BIM

BIM is an integrated process built on coordinated, reliable information about a project from design

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through construction and into operations. By adopting BIM, architects, engineers, contractors and owners can create coordinated digital design information and documentation; use that information to more accurately visualize, simulate and analyze performance, appearance and cost; and reliably deliver the project faster, more economically and with reduced environmental impact.

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Collision Detector “KCD™”, the Fastest Commercial Software Library on the Market?

15 December 2008

[Kineo CAM](#) announced the release of its collision detector KCD 2.04.6 software library.

Kineo Collision Detector KCD™ is the high efficiency collision detector from Kineo CAM. It comes as a software library, which allows an easy integration through its C++ programming API; using 3D geometrical data, KCD™ compares two lists of geometrical objects and quickly returns a series of results such as interferences and distances.

In digital 3D mock-up, KCD™ performs static or dynamic clash analysis. For robotic monitoring, KCD™ provides continuous collision avoidance.

In May 2004 Kineo CAM announced its version V1.5 with a 50% improvement of performance in response time.

Consecutively several software editors like TECNOMATIX and UGS PLM (both now part of Siemens PLM), Seemage (now part of the brand 3DVia from Dassault Systèmes), DELMIA (another brand of Dassault Systèmes) adopted KCD™ in CAD/CAM software products for automatic path planning.

Earlier this year, CYBERNETIX integrated KCD™ into CyxPro® V2.0 its software platform for graphical monitoring of remotely-operated systems; “It was important for us to rely on a collision detector which is both fast and robust. We did a careful comparison of available options and selected KCD™” recently reported Eric Auschitzky, Nuclear BU Director.

With KCD™ V2.04.6 Kineo CAM announces another breakthrough performance in collision detection by a mean improvement of 22% in response time or a memory consumption decrease of up to 90%.

Tests of performance show that KCD™ V2.04.6 can perform dynamic collision detections as fast as 0.8 milliseconds on large 3D models of more than 3 million polygons.

“With such performances, we expect that even users of very large 3D CAD models will experience for the first time, interactive collision and interference checking” says Laurent Maniscalco, Kineo CAM’s CEO. “The first commercial integration of KCD 2.04.6 for interactive and dynamic collision detections in digital mock-ups, DPA, will be based on Dassault Systèmes V5 PLM software platform”.

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CYA Technologies Releases CYA SmartRecovery for the EMC® Documentum® 6.5 Enterprise Content Management Platform

16 December 2008

CYA Technologies announced the availability of CYA SmartRecovery™ version 5.1 supporting the EMC® Documentum® 6.5 enterprise content management platform. This new release works transparently to protect the information assets associated with the Documentum Process Suite, Federated

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Record Services (FRS), and other Documentum 6.5 applications from logical information loss, which can cause compliance risk, lost revenue, reduced shareholder value, lost productivity, and in extreme cases, business shutdowns.

Logical failures, which account for 80% of all information loss,* can render one, several, or thousands of repository objects useless, and are caused by common occurrences such as administrative, programmatic, and user errors, malfeasance, and metadata corruption. CYA SmartRecovery helps organizations avoid the potentially disastrous consequences of logical loss by performing hot, synchronous backups of the Documentum repository, which enable a single administrator to recover granular objects back to their original states in the doctbase without taking EMC Documentum offline.

EMC Documentum customers that are upgrading to Documentum 6.5 can also leverage CYA SmartRecovery to ensure a successful and efficient data migration. The solution's Data Integrity Module identifies repository corruptions so that they may be rectified prior to the data conversion, assuring that all information will be accurate and accessible post-upgrade. The solution can be deployed out-of-the-box in as little as three days.

Furthermore, CYA SmartRecovery works with enterprise solutions such as EMC NetWorker, IBM Tivoli Storage Manager, and Symantec Veritas NetBackup to enable companies to achieve recovery point objectives (RPOs) of as little as 15 minutes in the event of a disaster or full system failure. CYA SmartRecovery is also available for EMC Documentum versions 5.3 and 6.0. For more information, visit <http://www.cya.com> or call +1.203.513.3111 x501.

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Delcam's New PowerINSPECT Supports Five-Axis Inspection

17 December 2008

Version 5 of Delcam's PowerINSPECT software includes support for five-axis scanning with Renishaw's REVO probe. This new release of the hardware-independent inspection software also features the ability to use multiple alignments within parts or assemblies, additional GD&T features, more flexible best-fit algorithms, improved CMM connectivity and more versatile report generation.

PowerINSPECT 5 is one of the first inspection software packages to support Renishaw's REVO for the verification of both geometric and free-form shapes on CMMs. The combined solution offers faster and more accurate measurement of feature-rich parts, such as powertrain components, and complex doubly-curved surfaces, including those found in aerofoils and turbine blades.

As the five-axis REVO head is much lighter and more dynamic than the CMM, with a significantly better frequency response, it is able to follow changes in the part geometry much more quickly. In addition, five-axis scanning minimises dynamic errors caused by the inertial forces that affect the moving mass of the CMM structure.

The new PowerINSPECT release incorporates proven five-axis simulation and collision detection technology from Delcam's PowerMILL CAM system. As a result, users can be confident that the inspection routines will operate safely and efficiently.

Five-axis operation for On-Machine Verification has also been enhanced, in particular by making the programming much easier. Canned strategies have been added for all standard geometric features so making it faster and simpler to generate inspection routines for prismatic parts.

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PowerINSPECT's new ability to use multiple alignments within a single part will allow independent verification of distinct areas within the component. This will make it simpler to identify the source of any error in a faulty example and so make it quicker and easier to rectify the problem.

Multiple alignments can also be important when checking assemblies of parts. They can be used to discover whether the error is in an individual component, and, if so, in which one, or whether the problem has resulted from an inaccuracy in the way in which the parts have been put together.

Inspection of more complex parts will also benefit from the enhanced best-fit options within the software. These now allow the user to prioritise the most important features in the part when identifying the most accurate alignment. For example, mating faces, which may need to be produced to a finer tolerance, can be given a higher priority.

The GD&T capability has been expanded to include symmetry, surface profile and run-out, as well as the previously-available true position, perpendicularity, angularity, parallelism and concentricity. The new options are all available within the GD&T Wizard, to easily guide the operator through the process.

Another new option is the ability to compensate for changes in the part temperature. This will be most helpful to companies using portable devices on the shop-floor, where it is impossible to maintain the temperature as consistently as can be done in a dedicated measuring area. The software includes specific expansion factors for different materials, so allowing accurate compensation allowances to be calculated.

The introduction into PowerINSPECT of I++ technology will make it easier to add the software to new hardware, especially for companies that use a variety of different devices. I++ is the standard communication format for CMMs and is supported by all major equipment manufacturers.

PowerINSPECT's reporting has always been one of the software's most popular features. With the new release, users have been given more control over the way in which the results are displayed. The previous highly-automated reporting methods are still available but users are now able to customise reports more easily. For example, the positions and contents of results labels can be adjusted to highlight the most important measurements.

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DP Technology Releases ESPRIT Mold Version 10 CAM Software

17 December 2008

DP Technology is now shipping ESPRIT Mold Version 10 (v10), the latest generation of its mold software.

Designed to be user-friendly while maximizing efficiency, ESPRIT Mold v10 is loaded with new features and upgrades — including a new patent-pending ESPRIT FreeForm 5-axis composite machining cycle and a new cycle designed specifically for machining impellers. In addition to other significant upgrades, ESPRIT Mold v10 takes advantage of multi-core processors (CPU) for substantially faster processing speeds.

ESPRIT Mold is designed to run on both Microsoft Windows XP and Microsoft Vista operating systems.

New Patent-Pending Free-Form 5-axis composite cycle

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Twenty-two new 5-axis machining strategies have been added to the existing 5-axis functionalities within ESPRIT Mold, an upgrade that translates to even greater machining flexibility and improved cycle times. The new patent-pending FreeForm 5-axis composite machining cycle allows users to independently define machining patterns and tool orientation strategies to be used for creating simultaneous 5-axis toolpaths, and includes 20 different machining strategies (cycles) in one — resulting in a wide range of easily manageable possibilities.

The new ESPRIT composite machining cycle gives users the ability to perform simultaneous 5-axis machining for a wide variety of different parts and industries—including the aerospace, medical and automotive sectors — with one simple user interface.

New Impeller Cycle

Built into ESPRIT Mold v10 — and ensuring a programming process that is both simple and user-friendly — is a new cycle developed explicitly for machining impellers. This new cycle includes a roughing strategy that optimizes the creation of the toolpath based on the current stock and a new strategy for finishing the hub. These two new strategies support machining the main blade as well as splitter blades.

Among the host of enhancements designed to streamline the programming process is the capability to use separate stock allowances for vertical walls and floors, in addition to the option to set a different stock allowance for a given zone (surface or group of surfaces) of the workpiece.

Another significant upgrade available in ESPRIT Mold v10 paves the way for even greater toolpath accuracy. All machining cycles, including those for 5-axis operations, now incorporate full collision detection during toolpath calculation for not only the tool, but also the tool shank and tool holder — a feature that guarantees collision-free toolpaths.

ESPRIT Mold File as a Template

An existing ESPRIT Mold file can now be used as a machining template for a new job, which allows for a reduction in programming time. Users can now drag and drop existing ESPRIT Mold files into the active workspace of ESPRIT Mold. The machining process of the imported file will be added into the new file, thus providing users with the ability to regenerate existing machining cycles onto new part geometry—realizing monumental time savings.

Users now also have the means to view simulation at any point on the toolpath, which allows for inspection of the toolpath at any location. This gives the user the ability to make a quick inspection, negating the need to simulate preceding areas.

New Multi-core Processing

The full performance of multi-core (dual-core, quad-core or more) is now fully realized in ESPRIT Mold v10, which results in an up to 145 percent processing increase for each core added (1 to 2, 2 to 4, etc.). Streamlining the transition from design to machining, ESPRIT Mold v10 features a new and improved CAD reader for Pro/E, UG, CatiaV4, CatiaV5, STEP, ACIS, Inventor and Parasolid, maximizing CAD to CAM reliability.

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IFS Strengthens Its Maintenance Suite with Constraint-Based Scheduling for Defense

12 December 2008

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[IFS](#) has enhanced its maintenance suite with constraint-based scheduling for repair shops in the aerospace and defense industry.

Managing planning in large maintenance shops is a challenge for both fleet operators and service providers in this industry. The Constraint-Based Scheduling tool for Work Orders is designed to effectively plan, release and execute work on the shop floor while working around constrained resources. Constraints are dealt with through synchronization of tasks, having the correct tools in place, releasing work only when spare parts are accessible and ensuring that the necessary skills are available as needed.

The functionality allows companies to predict how project changes will affect the date when a unit will be released back to service. Unlike the manufacturing industry, maintenance shops have high variability, as new work packages are often added and changed. A simulation tool that advises on whether extra work can be accommodated without jeopardizing the delivery date aids in project decision-making.

The tool can also help with lean maintenance, repair and overhaul (MRO) programs. These initiatives are often “point initiatives,” achieving optimization in only one area of operation. IFS’ Constraint-Based Scheduling for Work Orders, however, focuses on the entire value stream to identify bottlenecks and achieve the highest possible throughput.

“Currently, many defense organizations are outsourcing maintenance and modification programs to the industry on availability and capability contracts. The industry has a lot to gain by improving the turnaround times by introducing more sophisticated planning,” IFS CEO Alastair Sorbie said. “This focused product development is aimed at supporting one of our global strategies targeted towards the Performance Based Logistics (PBL) market, typically where we supply logistics solutions when payments for repairs and services are dependent on how well the repair shops perform in terms of waiting times,” Sorbie said.

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Mentor Graphics Quadruples Veloce Hardware Emulation Capacity to a Half Billion Gates

15 December 2008

Mentor Graphics Corp. unveiled the Veloce® Maximus product, the industry’s largest capacity hardware emulator. At up to 512 million gates, the Veloce Maximus product exceeds the capacity of competitive offerings by a significant margin. The most complex Systems-on-Chip (SoC) designs in development today demand Veloce Maximus-class capacity for effective functional verification.

Veloce Maximus is powered by the same emulation-on-chip technology as the current family of Veloce products, delivering megahertz-class verification speeds for both “target-less” simulation acceleration and in-circuit emulation applications. When coupled with Mentor Graphics’ extensive set of vertical market solutions, the Veloce Maximus product delivers a platform to meet the needs of Multimedia/Graphics, Computing, Networking and Wireless applications.

“Veloce Maximus continues to realize the scalability of our Veloce architecture,” said Eric Seloise, vice-president and general manager, Mentor Graphics Emulation Division. “We invested heavily to develop an architecture that meets the performance and capacity needs of our most demanding customers. Veloce Maximus is a significant milestone on our product roadmap, but we are also deep into the development of our next leap in emulation capacity and performance. We’re driven to keep pace with our customers’ needs.”

Single System Supports Simulation Acceleration and In-Circuit Emulation

While other vendors offer separate, disjoint product lines for simulation acceleration and in-circuit emulation (ICE), the Veloce product's architecture is well suited to both modes of operation. A complex testbench co-simulating on a workstation typically limits simulation acceleration to 10X or less. Veloce's Test Bench XPress (TBX) shatters this performance barrier via comprehensive support of transaction-level testbenches driving accelerated transactors through a high-speed SCMI-2 interface. TBX cuts simulation runtimes from hours to seconds, with speedups of 10,000X witnessed on customer designs. In-circuit emulation is advanced by a complete array of iSolve™ solutions spanning multimedia, interfaces like PCI-Express, and processors from ARM and others. iSolve solutions make it simple to connect your design to the physical world, slashing setup time while delivering comprehensive verification.

Multiple Clock Domains Stress Real-World System Behavior

Veloce's architecture supports 16-asynchronous clock domains to deliver the most accurate verification modeling capability. This allows users to emulate complex, real-world behavior, and to detect and debug difficult corner-case issues, such as cross-domain race-conditions and glitches that are missed by other platforms, detecting design errors prior to tape-out, and reducing project risk.

Simulation-Like Debug Delivers Productivity Boost

With a 500 million gate design, debug productivity is paramount. The Veloce Maximus product sports simulation-like features to allow faster and more productive debugging. The Veloce Maximus product simultaneously provides full visibility into each and every net of a 500 million gate design without impacting capacity or performance. Simulation users expect this level of visibility, and the Veloce Maximus product delivers. Other systems force a recompile to remap a limited number of probe points, an untenable notion with designs of this size. Simulation features like save-and-restore are also supported. Saving and restoring the state of a design after the end of an initialization sequence can save billions of clock cycles of verification across multiple regression tests. Maximus also supports assertion-based debugging including 0-In from Mentor Graphics.

Product Availability

First customer shipment of Veloce Maximus is scheduled for January 2009. For product information on the Veloce platform, contact your Mentor Graphics sales representative, call 1-800-547-3000, or visit the website at <http://ww.mentor.com/med>.

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Nemetschek North America Updates Vectorworks 2009 Product Line

17 December 2008

Nemetschek North America announced the release of its Service Pack 2 for the Vectorworks 2009 line of software, which includes Vectorworks Designer, Vectorworks Architect, Vectorworks Landmark, Vectorworks Spotlight, Vectorworks Machine Design, Vectorworks Fundamentals, and Renderworks.

"With this service pack we paid particular attention to stair quality, IFC import/export, and the overall user experience," says Mark Farnan, director of software development. "We have also addressed a much broader set of user concerns based on feedback from our customers worldwide."

The Service Pack is available as a downloadable updater. To install the Service Pack, go to the About

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Vectorworks dialog box in the Vectorworks 2009 application and click Check for Updates.

Vectorworks 2009 was released on September 15, 2008. The Vectorworks 2009 product line features a new engine that gives users superior 2D and 3D capabilities, at speeds that are up to 4-5 times faster for modeling operations. For a product-by-product breakdown of all the new version 2009 improvements, and to see some of these features in action, visit <http://www.vectorworks2009.net>.

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Siemens PLM Software Ships Femap Version 10

18 December 2008

Siemens PLM Software announced Femap® Version 10 software is shipping to customers worldwide. Femap is a PC-based CAE modeling solution and the finite element analysis (FEA) component of the Velocity Series™ portfolio.

The latest release helps users create FEA models from CAD data through new meshing features.

“We deal with some fairly complex geometry,” said Brenton Ellis, design engineer, Quest Aircraft Company. “Femap allows us to see how a part interacts with everything around it, for example, by letting us represent surrounding geometry as a surface mesh and combine that with a solid mesh of the individual part. Features such as this let us have the detail we need, and let us analyze things in a way that provides the most useful information.”

Accelerated CAE model development

Femap V10 provides the following pre- and post-processing benefits to CAE analysts:

- * Create accurate models more efficiently: Since FE meshing is central to the whole simulation process, Femap V10 introduces new meshers. The latest release automates current meshing technology while adding new interactive meshing with live model and element checking functionality. New remeshing and mesh quality functionality is now centralized within the user interface. This improves workflows and makes it easier to consistently and accurately produce CAE models for analysis.
- * Mesh shell models faster: A new mid-surfacing method simplifies and speeds shell model creation for sheet metal structures.
- * Create larger models: Femap is integrated with NX™ Nastran® and both support 64-bit Windows. This enables more access to random access memory (RAM) for pre-processing and solving much larger multi-million node models.
- * Work more closely with the solver: V10 provides strengthened NX Nastran solver integration support, including axisymmetric quad and tria elements, new weld and fastener extensions, linear and glued contact extensions.

RPC Technologies Australia was able to use these enhanced features to significantly speed their analysis. “On a 1.45 million degrees of freedom analysis, we cut analysis time from 2.5 hours to just 4.5 minutes. We knew that the 64-bit version would be better, but we are still amazed about a 97 percent savings,” said Mark Harrison, Design Office manager.

Velocity Series is a comprehensive family of modular, integrated solutions addressing the PLM needs of the mid-market. Consisting of a preconfigured family of digital product design, analysis and data management software offerings,

For more information, visit <http://www.siemens.com/plm/femap>.

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Siemens PLM Software's NX NASTRAN Solves World's Largest Structural Analysis Problem

15 December 2008

Siemens PLM Software announced a computational break-through in implicit finite element analysis (FEA) technology. Using commercially available hardware, the current production version of the company's NX™ NASTRAN® software was able to solve a structural analysis problem with a half-billion equations "virtually overnight."

The analysis was conducted to simulate the behavior of an entire airplane wing structure undergoing a bending test. The resulting problem size of 500 million equations was successfully completed in less than 18 hours of elapsed time and shattered Siemens PLM Software's previous record – announced in February 2006 – which was also set by NX NASTRAN for a similar problem. To provide perspective, a structural analysis of an entire automobile body modeled with shell elements, could be solved with about 100 million equations.

"Our customers make some of the world's most sophisticated products, requiring extremely detailed finite element models to achieve the solution fidelity necessary to ensure their quality and safety," said Chuck Grindstaff, chief technology officer of Siemens PLM Software. "Simulating the destructive wing-bending test is an especially important component of virtual product development in airplane manufacturing and the 18-hour turnaround time provides a solution virtually overnight. As a result, our customers' workflow process can proceed uninterrupted."

"Such large problem sizes were considered impossible just a few years ago, both from a numerical accuracy and computational complexity point of view," added Dr. Louis Komzsik, chief numerical analyst of Siemens PLM Software. "Today, we can confidently predict that solving a one billion equation problem will be feasible in the near future. And with the demonstrated ability of NX NASTRAN to solve these huge problems, imagine how fast it can solve the more typical analysis problems encountered everyday by our customers, across a wide variety of industries."

Technology detail

The FEA model solved by NX NASTRAN consisted of one hundred million grids along with approximately 98 million shell and 49 million solid elements. The resulting finite element problem consisted of 500 million equations and had more than 600 million global degrees of freedom when a linear static analysis with a single load condition was executed.

The analysis required 1069 minutes, or 17.8 hours of elapsed time on an IBM Power 570 server. The computer contained eight POWER 6 cores at 4.7 GHz, 64 GB of memory and 24 striped disks of 148 GB capacity each. The analysis used 42.4 GB of memory, executed 30.3 Tera Bytes of I/O operations with a 2.26 Tera Byte disk footprint. For more information on NX NASTRAN, please visit

<http://www.siemens.com/plm/nxnastran>.

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SoftInWay Announces a Bundle on Its Innovated AxSTREAM Educational Version for Winter/Spring Semester

15 December 2008

SoftInWay Inc. has launched an innovated release of its AxSTREAM Education Version. The new software features all the latest SoftInWay developments, among which are the implementation of Campbell diagram, an enhanced Euler flow solver, more detailed Mollier diagram and the adaptation of the Streamline Solver to centrifugal compressors.

The educational version updated for AxSTREAM 2.4.1.1 ensures more accurate calculation results and optimizes the whole process of turbomachinery flow path design and analysis.

The capabilities of 3D flow module AxFLOW (Euler and potential flow solvers) have been expanded. Now the user of Euler flow solver can control/change mesh quality, calculate the whole stage using previous calculation results as initial values and quickly define 3D flow path characteristics. Another important innovation is Campbell diagram (AxSTRESS) which helps users to find the critical speed for a stationary frame of reference.

AxSTREAM Educational Version is available for axial gas and steam turbines; radial turbines; radial and centrifugal compressors. Coupled with AxSTREAM training course, the edu version forms an all-round educational suite for students of technical universities, their professors seeking to upgrade their educational tools and experienced engineers who will be able to enhance the design process using AxSTREAM.

[SoftInWay](#) is interested in creating a new generation of turbomachinery engineering pros and offers special discounts for academia. In Winter/Spring semester innovated AxSTREAM™ Educational Version for Turbomachinery Flow Path Design comes in bundle: students of universities who acquire 10 licenses and place an order till January 15, 2009, will get 50% discount for SoftInWay training in Boston on February 24-26. The promotion expires on January 9, 2009.

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SolidWorks Labs Adds New Applications

15 December 2008

If you're in the dark about how 3D CAD software might look in the next decade and beyond, then you haven't been paying attention to [SolidWorks Labs](http://labs.solidworks.com/) (<http://labs.solidworks.com/>).

The "technology sandbox" for curious 3D CAD users today added four new experimental applications, all free for download, and unveiled an overhauled Web site.

Treehouse is a breakthrough tool for design teams that think from the top down. Users can create and customize a conceptual, graphical representation of an assembly before beginning design work, simply by dragging and dropping icons. Treehouse enables you to name your components and add custom properties all before creating a single document. Once the layout is complete and all your CAD documents have been generated, import the top level assembly into any PDM system and start assigning components to the appropriate users. It is that simple.

A new add-in named **Tagger** harnesses the hidden power of one of CAD's most overlooked capabilities, tags, to improve communication with colleagues and business partners by injecting relevant information into design files. Open an assembly, part, or drawing, and see a list of tags used in that document in a

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dedicated tab in the task pane. Click on a term to highlight features in the design that are tagged with that term. Any feature can have any number of tags of any nature, easing search, retrieval, annotation, and communication. Users can create favorite tags they can easily apply to any feature at any time.

Presentation Studio walks designers and engineers through the creation of high-impact interactive PDF files for non-CAD users such as customers, partners, marketers, salespersons, and executives. The files can be read by any Adobe® Acrobat® Reader® software, version 8 or above. 3D models embedded in the PDF files have full 3D interaction, including pan, zoom, and rotate. Users can choose background, view angles, and whether or not the assembly can be viewed in an exploded format. Installed as a SolidWorks add-in after download, Presentation Studio makes great design briefs, price sheets, technical summaries, feature review, and product specification presentations.

The **COLLADA Export** add-in lets SolidWorks users export solid models in an industry standard 3D object and motion format for use in programs like [Microsoft® Robotics Developer Studio 2008](http://msdn.microsoft.com/en-us/robotics/default.aspx) (<http://msdn.microsoft.com/en-us/robotics/default.aspx>). Robotics developers can then use the studio software to correct any application issues early and maximize their performance.

In addition to the new applications and the dozen that were already available, SolidWorks Labs has updated the entire [Web site](#), providing easier navigation, product related user comments, ratings, and video overviews.

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SURFCAM Velocity 4 – Ships Today

15 December 2008

[Surfware, Inc.](#) announced the release of SURFCAM Velocity® 4. New features have been added to the SURFCAM 3-Axis and Multi-Axis products. These new capabilities, along with many other enhancements in SURFCAM Velocity 4, fulfill wide-ranging customer requirements.

“We have been using the beta version of SURFCAM Velocity 4 to prototype, test and produce impellers for the turbo machinery industry,” says Jeff James, R & D Manufacturing Engineer for Oxnard, California-based Vortech Engineering. “We upgraded from SURFCAM Velocity 3 and were really impressed by the outstanding versatility of SURFCAM Velocity 4 and its many additional options for machining. Also, the customer support for this product is excellent.”

With increasing demands for shorter cycle times and improved part quality, high-speed machining is a critical component for the success of many machine shops. SURFCAM Velocity 4’s new 3-Axis HSM strategies feature smooth and fluid toolpaths that ensure superior surface finish while accommodating maximum cutting speeds that shorten the machining cycle. New machining strategies feature faster processing, multi-processor support, automatic arc filtering, optimized retracts and adaptive stepdown. Among the newly implemented HSM operations are Rest Machining, Steep/Shallow, Offset Pencil and 3D Offset.

SURFCAM Velocity 4 Multi-Axis has been elevated to a new level. Newly implemented gouge avoidance strategies allow users to specify up to four separate check surface groups; individual gouge avoidance strategies can be applied to each successive group. New lead-in and lead-out moves accurately control the tool motion when approaching or leaving the machined part. Users now can also custom tailor the retract motions to be closer to the part type and orientation, thus reducing cycle time and allowing safer tool repositions. Numerous enhancements have been made to gap handling, surface

edge control and Swarf machining.

Other new and notable features in SURFCAM Velocity 4 include:

- **Solid Tool display** -- ensures realistic visualization of the tool motions when backplotting a toolpath
- **Part and Surface Boundaries** -- creates various types of boundaries using the entire part or using a set of selected faces. New boundary types include silhouette and the shallow areas boundaries.
- **Current CAD Interoperability** – SURFCAM Velocity 4 supports the most recent releases from SolidWorks®, Autodesk®, CATIA®, Pro/Engineer®, and UG® (NX) to ensure accurate data exchange.
- SURFCAM Velocity 4 is available with TrueMill®, Surfware's patented toolpath technology that manages tool engagement and controls material removal rates to increase productivity and extend tool life.

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Synopsys Expands Confirma Hardware-assisted Verification Solution with the HAPS-A31 System

15 December 2008

Synopsys, Inc. introduced the newest addition to the Confirma™ ASIC/ASSP Rapid Prototyping Platform, the HAPS-A31 system which contains an Altera® Stratix® III FPGA. The HAPS-A31 system is a single-FPGA prototyping board in the PCI Express® (PCIe) form factor equipped with an Altera Stratix III SL340 FPGA. The HAPS-A31 system is the first HAPS™ board to contain an Altera device and the first to adopt the PCIe format, which will permit the board to be plugged directly into any 4-lane PCIe slot. This high bandwidth interface is designed to enable designers to tightly couple application software development to high-performance DSP algorithms and IP blocks and take advantage of the Synopsys rapid prototyping solution. This capability results in a more comprehensive and reliable validation platform which can cut days, even months off of verification cycles.

"Stratix III FPGAs are ideally suited for development of DSP algorithms," said Chris Balough, senior director of software, embedded, and DSP marketing at Altera. "The flexibility of the HAPS boards combined with the functionality of Altera's high-performance, high-density FPGAs will provide customers doing software development or hardware/software co-verification with superior functionality and a very powerful prototyping solution."

"Virtually every ASIC and ASSP design today is prototyped in FPGAs," said Juergen Jaeger, director of product marketing, ASIC verification at Synopsys. "This Altera Stratix III FPGA-based board is ideal for high-performance, DSP-centric designs. Enabled by its PCIe form factor, it provides an elegant solution for early software development and hardware/software co-verification."

With tightly integrated DDR3 memory, on-board clock generators, multiple voltage regions, voltage and temperature monitoring, the HAPS-A31 board can be used as a small stand-alone system for validation of algorithmic systems and IP. Or, for bigger tasks, the HAPS-A31 system can easily be expanded by adding other boards from the HAPS family. All HAPS prototyping boards use the HapsTrak™ standard, a set of guidelines for pinout and mechanical characteristics to help ensure compatibility with previous and future generations of HAPS motherboards and daughter boards.

Fast Algorithm Validation

The HAPS-A31 system combined with Synopsys' Synplify® DSP high-level synthesis tool provides a

comprehensive solution for fast hardware/software validation of wireless, telecommunications, video and imaging applications. The HAPS-A31 system provides a rich set of computational resources in the Stratix III SL340 FPGA, which has 576 embedded 18x18-bit hardware multipliers, 17Mbits of embedded memory, and a 533MHz DDR3 memory interface. The Synplify DSP software provides a fast, efficient path to getting designs implemented onto the HAPS-A31 system by providing a high level modeling and IP library which it can architecturally optimize and synthesize into the Stratix III FPGA hardware resources.

About HAPS High-performance ASIC Prototyping System

The HAPS (High-performance ASIC Prototyping System) is a high-performance and high-capacity FPGA-based system for ASIC prototyping and emulation. The HAPS systems are modular, with single and multi-FPGA motherboards and standard or custom-made daughter boards, which can be stacked together in a variety of ways. Among the off-the-shelf functions available on standard daughter boards are video processing, various memory types, and interfaces to Ethernet, USB and PCI Express. For more information, please visit the [HAPS ASIC/ASSP Prototyping System Website](#).

About Synplify DSP High-level Algorithmic Synthesis for FPGAs and ASICs

The Synplify DSP tool enables a unique ESL synthesis methodology that realizes significant productivity and portability advantages over traditional HDL design flows. System and algorithm designers can capture complex algorithmic behavior using the Synplify DSP library, which includes modeling features such as vector arithmetic, fixed-point precision up to 128-bits, and a rich set of DSP building block IP cores. The Synplify DSP high level synthesis engine is designed to allow designers to automatically implement and explore area/speed-optimized RTL implementations from a single model (eliminating the burden of hand-coding functions and architectural optimizations), achieves significantly faster design capture, speeds time to market, and helps enable rapid design exploration that results in improved quality and lower cost. For more information on the Synplify DSP high-level synthesis tool, visit <http://www.synopsys.com/Tools/SLD/AlgorithmicSynthesis/Pages/default.aspx>

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3D Mesh Component from Spatial Accelerates Engineering Application Development

16 December 2008

Spatial Corp. announced the availability of [3D Mesh](#), an object-based software component providing fully-configurable surface and volumetric meshing capabilities. The component includes mesh generation and pre-processing for a wide-range of applications including mechanical design, structural analysis, heat transfer, computational fluid dynamics and electronic design automation (EDA). With 3D Mesh, application providers with proprietary solvers are able to accelerate the delivery of a fully-integrated engineering analysis solution. Spatial's 3D ACIS Modeler customers further benefit from 3D Mesh's integration with ACIS and HOOPS 3D Application Framework.

Spatial licenses 3D Mesh from Visual Kinematics, Inc ([VKI](#)), a leading supplier of component software tools for the CAE industry for 20 years.

“We chose to partner with Spatial because they also have a long history of selling and supporting technology leading 3D software components. The integration of ACIS with the VisTools/Mesh (3D Mesh), combined with Spatial's experienced support and professional services organization, provides a compelling reason for customers to choose Spatial for their component needs” stated Gordon Ferguson,

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President of VKI. “We are working closely with Spatial in support of their sales efforts, and continued development of our VisTools/Mesh component based on joint customer feedback.”

Application providers are looking for ways to accelerate product delivery, while maintaining their competitive advantage. CAE suppliers often differentiate themselves through proprietary solvers best suited for their applications and end-user needs. Mesh generation, however, is not usually a core competency and these vendors prefer to license a third-party component for this capability, rather than carry the cost and risk associated with doing the development work themselves. For internal development organizations working on highly-specialized applications, 3D Mesh enables them to concentrate their resources on addressing the specific problem, rather than expend valuable resources on technology that is already generally available.

“We are constantly looking to partner with companies like VKI that excel at what they do and offer technologies that complement our existing product portfolio,” commented Jerry Walters, Vice President of Marketing, Sales and Service. “Spatial ensures that the components all work together, eliminating the integration burden for our customers. Plus, our customers benefit from a single source for sales, support, and services.”

3D Mesh is delivered as thread-safe libraries, enabling multi-threaded applications to take advantage of multi-core hardware platforms and deliver optimal application performance. The software component includes an ACIS bridge, for easy integration with ACIS- and InterOp-enabled applications.

Key Features of 3D Mesh:

- Fast, fully automatic generation of triangular and quadrilateral surface meshes and tetrahedral volume meshes
- Mapped mesh, boundary layer, and extruded mesh generation including triangular, quadrilateral, tetrahedral, wedge, pyramidal and hexahedral elements
- Generation of both linear and parabolic elements in all cases
- Arbitrary points and lines may be embedded into a surface mesh; as well as points, lines, and triangles into a volume mesh
- Mesh sizing control with any combination of global element size, minimum element size, curvature based sizing, and growth rate parameters
- Unique defeaturing and healing capabilities on both the 3D geometry and the mesh

[3D Mesh](#) is available for free evaluation. Request forms are available on the company's [website](#).

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VMM Users Drive New Features in Expanded Release

17 December 2008

Synopsys, Inc. announced the release of an expanded version of VMM. The updated release includes new, user-driven features, such as a multi-stream scenario generator, transactor iterator and command-line options manager. These features increase scalability from block to system-level, ease-of-use and verification productivity. A new Performance Analyzer application further improves productivity by enabling analysis of shared design resources. The enhancements to VMM streamline the development of today's increasingly complex verification environments.

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"After a thorough evaluation of competing verification methodologies, we standardized on VMM to streamline verification of our IP and microcontrollers," said Sury Maturi, director of the Design Automation Group at National Semiconductor. "The new, expanded release of VMM includes a number of enhancements that will allow us to further reduce our verification cycles, such as the multi-stream scenario generator and new test structure, which enables us to create sophisticated controllable scenarios and, consequently, achieve greater scalability and reuse of stimulus."

"As an international provider of high-end functional verification consulting services, we have deployed VMM for our clients on a range of projects across the globe," said Jason Sprott, vice president of Consulting at Verilab. "Because of our significant level of hands-on experience with verification methodologies, we were in an excellent position to help guide the evolution of VMM and contribute to the enhancements in the latest release. It now enables even higher levels of scalability, simplifies implementation and is more capable than ever at helping design teams accelerate the verification process."

"A robust and production-proven methodology is a must in order to meet today's demanding project schedules, and a strong ecosystem is equally important for ease-of-adoption," said Michael Hoyt, president and chief executive officer of Paradigm Works. "VMM not only delivers the strongest ecosystem in the industry, it also offers a suite of extremely useful applications. We have been and will continue to be part of this growing ecosystem focused on delivering applications that improve verification productivity."

Increased Scalability

The new release of VMM includes a multi-stream scenario generator, which increases block to system-level scalability by enabling users to layer and control the multi-stream scenarios hierarchically. It provides an easy way to generate, control and schedule different heterogeneous transaction sequences. The execution of multi-stream scenarios creates coordinated stimulus on multiple channels anywhere in the verification environment.

Enhanced Ease-of-use

With VMM's new transactor iterator, users can now configure multiple transactors in an identical fashion using the same amount of code it takes to configure a single transactor, simplifying the transactor configuration process. Additionally, a new command-line options manager simplifies the task of managing complex verification environments within cross-functional teams by making it easier to check for run-time command-line options or options set through a set of option files.

Improved Productivity

A new application called Performance Analyzer now provides the ability to measure statistical functional coverage metrics, such as the utilization of shared resources, the response time of arbiter or slave devices, or the processing time of a functional block. The performance data can be queried and computed from multiple simulation results and performance metrics reported textually or graphically.

The latest release of VMM offers a new base class that enables test writers to compile and elaborate all tests at once then select, at run-time, which test to execute. This eliminates the need for a recompile of each test, thereby speeding regression turnaround time. In addition, a new channel recording and replay capability enables users to run entire regressions just once and perform playback later without stimulus generators for specific components of the verification environment.

"[Synopsys](#) and the EDA industry are seeing broad deployment of SystemVerilog," said Manoj Gandhi,

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senior vice president and general manager of the Verification Group at Synopsys. "We continue to provide technological leadership in this market with increased investments that address the growing verification challenges of our customers. The expanded release of VMM is the result of a successful and innovative collaboration between Synopsys, our customers and partners. It provides an excellent foundation for building a single, standardized verification methodology."

About VMM

The VMM methodology enables chip development teams to use SystemVerilog to create comprehensive verification environments using transaction-level, coverage-driven, constrained-random and assertion-based techniques, and specifies library building blocks for interoperable verification components. The latest enhancements to VMM are backward compatible with the previous version of VMM, compliant with SystemVerilog and entirely open source. The expanded release of VMM is available for immediate download at <http://www.vmmcentral.org>.

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Zuken Announces New Interface Solution for Product Data Management

17 December 2008

Zuken has announced that they are working on the development of a new and unified intercommunication bridge between Zuken's prime PCB design solution CR-5000 and 3rd party PDM systems with a new product called Zuken PDM Adapter. This new solution will provide an optimal interface between CR-5000 and third party enterprise PDM systems, allowing users of CR-5000 to easily handle electrical design and structure data from the enterprise level in their existing PDM system. This forms part of a strategy by Zuken to extend its product portfolio for the whole product data management area and expanding further Zuken's growing portfolio of PLM ready solutions which includes the proven advanced DS-2 solution for integrated electrical design management. As Zuken's data management solution Zuken PDM Adapter interfaces electrical design data to third party PDM systems for a whole product structure, and in addition to this, DS-2 offers an option to optimize electrical design process management. Thus, Zuken can provide total design environment for its customers.

The new Zuken PDM Adapter integrates PCB engineering into the supply chain, enabling the design structure of circuit and PCB's created within CR-5000 to be handled within user's existing company-wide PDM systems for lifecycle management functions such as access control, maintaining and sharing master data among distributed locations. It will also enable the user to add links between CR-5000 electrical design data and other forms of design data in various connectivity stages; for file level data management and to allow the insertion of file level structures with relationships and tool controls. For increased flexibility this adaptable solution will allow users to manipulate with ease electrical design data and associated structures from the enterprise level in third party PDM systems.

The openness of connectivity allows Zuken PDM Adapter to remain neutral and provides non-vender-specific integration capabilities for any PDM system which has an open interface. As a first step in the initial release scheduled for launch during 2009 in Europe and the USA, Zuken PDM Adapter will support SmarTeam and TeamCenter. This will be followed by support for other 3rd party PDM systems.

The native Application Programming Interface calls inside of Zuken PDM Adapter enables direct data access of raw data from CR-5000 design data files and the PDM system in use, enabling seamless communication between electrical design with CR-5000 and PDM environment.

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More detailed information about Zuken PDM Adapter is available from the supporting press pack in Zuken's press room, visit <http://www.zuken.com/pressroom> for more information. You can also contact your local Zuken representative to discuss this latest Zuken innovation further.

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ZWSOFT Unveils ZWCAD 2009 Beta

18 December 2008

ZWSOFT announced ZWCAD 2009 Beta, the next milestone in its line of DWG-compatible CAD products. As a productive drawing solution, ZWCAD 2009 Beta makes improvements in such functions as Hatch, Refedit, Insert, Pasteclip, Explode, Trim and Extend. Thus, the stability of ZWCAD 2009 Beta is greatly improved. In addition, its processing speed is also increased in overall performance.

Improvements Requested by Users

- 1) To provide more efficient collaboration and drawing management, ZWCAD 2009 adds Tool Palettes, eTransmit, Aerial View Window, Multiple Grips Editing, Filter, etc.
- 2) To improve compatibility with dimensions, ZWCAD 2009 adds Joggled Dimension and Arc Length Dimension.
- 3) To improve general drafting efficiency, ZWCAD 2009 improves association to the hatch, tracking to entity snaps, Refedit to the editing of external reference files, and unlimited undoes to the Undo/Redo mechanism.

Updated APIs: The Power of Custom Objects

Improvements made to the DRX application programming interface allow users to create custom objects that can be inserted, pasted from the Clipboard, stretched, extended, trimmed, and exploded.

New in ZWCAD 2009 Beta

New features in the beta of ZWCAD 2009 are the Tool palettes, eTransmit command, Aerial View Window, Editing with Multiple Grips, and dimensioning of Joggled Dimension and Arc Length Dimension.

To download ZWCAD 2009 Beta, please [click](#) here

ZWCAD 2009: Inspiration for CAD Designers

Produced with streamlined productivity in mind, ZWCAD 2009 provides a platform for CAD designers, especially application developers. The many APIs (application programming interfaces) allow one to expand ZWCAD 2009 through powerful and efficient add-ons.

Some 19 professional applications are due to be ported to ZWCAD 2009 following its official release. These applications cover the range from civil engineering, architecture, and interior design, to electrical and mechanical engineering. For mechanical engineers, add-ons permit mechanical design and CNC machining. Applications for many other industries will provide further opportunities for designers of all types.

Following the initial release of ZWCAD 2009 in English, six localized versions will become available within one to two months: Czech, German, Japanese, Polish, Russian, and Spanish. In active progress are French and Hungarian localizations.



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