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Acquisitions

Bentley Acquires Hevacomp, Ltd., Expanding Portfolio of Software to Improve Performance of Buildings

22 January 2008

Bentley Systems, Incorporated announced that it has acquired Hevacomp, Ltd., a Sheffield, England-based provider of building services design software dedicated to improving the performance of buildings. Included in its portfolio is software for energy analysis, heating and cooling load calculations, pipe and duct sizing, and electrical system design and product catalogs. Hevacomp is at the forefront of simulation for building energy analyses, incorporating in its offerings the EnergyPlus engine, developed

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by the U.S. Department of Energy, and software certified to perform CO2 emissions calculations required under Part L of the U.K. building regulations. Market demand for these energy analysis products is growing rapidly in the United Kingdom due to highly aggressive government regulations designed to reduce the country's carbon consumption. By adding applications to Bentley's comprehensive portfolio that will help architects, engineers, and low-carbon consultants design buildings that consume less energy, have reduced CO2 emissions, and cost less to operate, this acquisition extends the company's commitment to sustaining infrastructure and increasing the inventory of "green" buildings around the world.

Commenting on this latest Bentley acquisition, CEO Greg Bentley said, "The Hevacomp product line is an important addition to our growing portfolio of solutions that help sustain infrastructure and the environment. Hevacomp's substantive analysis applications leverage the content of the Building Information Model, incorporating rigorous engineering and enabling infrastructure professionals and owner-operators to improve building performance and reduce lifecycle costs.

"On behalf of all Bentley colleagues, I welcome Hevacomp users to the Bentley user community and the Hevacomp colleagues to the Bentley team. We look forward to working closely with both to help drive innovations in applications and best practices that will be instrumental in creating the next generation of energy-efficient buildings."

Tony Baxter, former managing director of Hevacomp and now Bentley Building's director of product management for building services and energy analysis, said, "We are very pleased to become part of Bentley's global organization and to help support its commitment to delivering world-class building services tools and applications. Joining forces with Bentley is the best way to build upon Hevacomp's 30-year track record of successfully providing a complete set of design tools and content for building services engineers, mechanical and sustainability engineers, and low-carbon consultants. Together, we can extend the deployment of these solutions, along with new innovations, worldwide."

For more information about Bentley's Hevacomp line of products and services, visit www.bentley.com/Hevacomp.

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Bentley Acquires LEAP Software, Inc., Expanding Portfolio of Software for Analysis and Design of Concrete Bridges

24 January 2008

Bentley Systems, Incorporated announced that it has acquired LEAP Software, Inc., a provider of analysis and design products for concrete bridges. The LEAP bridge solutions are the industry standard across North America, used by 37 U.S. state departments of transportation, the U.S. Federal Highway Administration, a large number of city and county agencies, and top bridge engineering consultants. The flagship product, LEAP Bridge, is an analysis, design, and load-rating application that integrates all bridge design components into one application with a single user interface. The LEAP products complement and strengthen Bentley's end-to-end bridge design and management solution, which includes Bentley Bridge RM for cable-stayed, suspension, and segmental bridges; Bentley BridgeModeler and Bentley LARS for bridge load-rating calculation, analysis, and analytical modeling; GEOPAK Bridge; InRoads Bridge; Bentley Rebar; Bentley PowerRebar; and many other products.

Commenting on this latest Bentley acquisition, Gabriel Norona, Bentley senior vice president, said, "LEAP software is a critical addition to Bentley's bridge portfolio as we focus our efforts on bridge

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information modeling (BrIM). Through a concerted BrIM initiative, we will leverage intra-operations across these industry-leading solutions, enabling delivery of safer, better-engineered bridges and opening a door to improved deployment models for bridge construction, maintenance, operation, and rehabilitation.”

Added Bhupinder Singh, senior vice president, Bentley Software, “The need for a more comprehensive and systematic approach to bridge planning, design, construction, operations, and maintenance has never been more critical. Our world faces the incredible challenge of repairing aging infrastructure in developed transportation networks and meeting the extraordinary demand for new transportation networks in developing economies.

“By adding the LEAP analysis and design software to our rapidly growing portfolio of integrated bridge products, Bentley advances its commitment to helping users create new bridges and maintain and upgrade existing bridges more efficiently and cost-effectively. On behalf of all Bentley colleagues, I welcome LEAP Software users around the world to the Bentley user community and LEAP Software colleagues to the Bentley team.”

Lee Tanase, former president and CEO of LEAP Software, now a Bentley vice president, said, “All of us at LEAP Software are pleased to join the Bentley team charged with developing innovative solutions that provide the functionality infrastructure professionals need to sustain the world’s bridges. Bentley’s vision of providing a comprehensive and integrated portfolio of bridge products to address the lifecycle of bridge infrastructure is exactly what our users – and the world – need.”

About LEAP Products and Services

LEAP software for the structural engineering community features a comprehensive range of analysis and design capabilities that deliver accurate results. The line includes integrated analysis and design products for concrete bridges and buildings.

LEAP Bridge integrates all bridge design components into one product with a single user interface. All bridge geometry, substructure, and superstructure analysis, design, and load rating are completed in one powerful application with a central project database for parametric design. Component design modules address:

- Design, analysis, and load-rating for simple- and multi-span precast/prestressed bridge beams
- Analysis and design of post-tensioned and cast-in-place reinforced concrete box girder and slab bridges constructed on falsework
- Design of longer prestressed/post-tensioned bridge spans using spliced prefabricated girders
- Analysis and design of reinforced concrete bridge piers and foundations

For more information about Bentley’s LEAP line of products and services, visit

<http://www.bentley.com/LEAPsoft>.

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Company News

WorkNC is Number One in Japan Again

17 January 2008

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In a December 2007 repeat of its annual survey of Japanese die and mold makers, the daily Nikkan Kogyo Newspaper, which specializes in business and industrial affairs, found that WorkNC from SESCOI was the most widely used CAM system in Japan for the second year running.

The number of companies using WorkNC was twice that of the nearest non Japanese CAM system. Despite tougher trading conditions for Japanese die and mold makers, 61% of the companies surveyed intended to invest during 2008 to cut costs, improve quality and shorten delivery times. They showed particular interest in 5-axis machining, which they saw as helping them to fuel overseas expansion which was planned by 27% of the sample.

WorkNC matches this trend with its 5-axis routines including Auto 5, which automatically translates 3-axis movements into 5-axis toolpaths, allowing companies to machine more of the part in one setting with shorter and more rigid cutters.

The survey also showed that Japanese die and mold makers wanted to achieve improvements in ease of use, data modification and employee skill levels. SESCOI launched WorkNC G3 (V19) in various countries around the world at the end of 2007. Its third generation software includes a new graphical interface which ergonomically combines design, analysis, programming and simulation. The main aims of G3 are to make the system more intuitive in its operation, and the already extensive toolpath editing capabilities even more powerful.

Training and education of its customers around the world is also a high priority for SESCOI and in Japan it held a series of 12 WorkNC seminars in September and October 2007, welcoming 356 delegates from leading companies such as Fuji Heavy Industries Ltd, Miyazu Seisakusho and RYOBI Ltd.

Shinsuke Imura of SESCOI Japan concluded, "We are delighted that we have retained our number one position in the Japanese market. The new developments in the latest version of WorkNC and our 5-axis capability fit well with the trends revealed in the survey, enabling us to continue to offer Japanese die and mold makers the most productive CAM system in the industry."

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Events News

CGTech to Show VERICUT 6.2 at WESTEC

16 January 2008

[CGTech](#) will exhibit the latest version of VERICUT CNC machine simulation and optimization software at the WESTEC SME show:

WESTEC Booth 2628 Los Angeles, CA March 31 - April 3, 2008

VERICUT 6.2 features several enhancements that increase the ability of manufacturing engineers to develop, analyze, inspect and document the CNC programming and machining process.

"VERICUT sits in a unique position in the process chain, in between the creation of the NC program and its physical application on the shop floor," said Bill Hasenjaeger, Product Marketing Manager. "VERICUT software development is driven by the evolutionary changes in manufacturing technology: new CAD/CAM software features, new machines and tooling, new machining techniques and processes, and our customers' needs to implement and improve on these changes. VERICUT 6.2 includes several new innovations to simplify validating even the most complex configurations in order to produce better

results and reduce the time spent in the programming and machining cycle.”

VERICUT Product/Function Overview:

VERICUT is CNC machine simulation, verification and optimization software that enables users to eliminate the process of manually proving-out NC programs. It reduces scrap loss and rework. The program also optimizes NC programs in order to both save time and produce higher quality surface finish. VERICUT simulates all types of CNC machine tools, including those from leading manufacturers such as Mazak, Makino, Matsuura, Hermle, DMG, DIXI, Mori Seiki and Chiron. VERICUT runs standalone, but can also be integrated with leading CAM systems such as Catia V5, Unigraphics, Pro/E, MasterCAM, EdgeCAM and GibbsCAM.

NC Program Review Enhancements

A new “NC Program Preview” offers an option to process an NC program in VERICUT without actually simulating material being removed. This “quick check” is very fast and uses much less memory. When in preview mode, VERICUT displays a tool trace of the NC program over the design model. Preview checks for collisions, gouges, minimum excess and instances where axis limits are exceeded. At the end of the preview VERICUT enters NC Program Review mode.

Several new utilities have been added to the NC Program Review window. These include: a calculator, user-configurable text coloring, syntax checking and block renumbering options. The syntax check enables users to check the NC program for syntax errors based on a user defined set of criteria. This feature is also accessible from the NC Program Review editor. Users can turn On/Off VERICUT defined syntax checking rules (error conditions) and define custom syntax checking error conditions. Users who manually create and edit NC programs can now transfer NC blocks from the MDI window directly into the NC Program.

New Tool Setup Wizards

Complimenting the milling tool setup wizard introduced in VERICUT 6.0, a Turret Setup wizard has been added. The new Turret Setup enables users to easily load, change tools, or change tool positions in a turret. Users can also easily create a swept model of a turret.

The Tool Manager has also been enhanced to enable users to describe the shape, position, and orientation of a waterjet cutter or a tap in a tap tool assembly.

Simulate Tapping

VERICUT now supports simulation and analysis of tapping operations. Tapped holes are visually differentiated from other drilled/bored/reamed holes. VERICUT checks for correct feed rate and direction when using a tap tool, and also detects if the tap hole is pre-drilled too small.

More Powerful X-Caliper

X-Caliper allows users to measure thickness, volume, depth, gaps, distances, angles, hole diameters, corner radii, scallop heights, etc. VERICUT 6.2 can now directly measure the depth of blind holes as well as the top and bottom radius of a countersink. Picking a hole returns the center point.

X-Caliper can also be used to measure the distance between the tool and the stock, and shows the thread features of a tapped hole (e.g. pitch threads/inch (or mm), etc.), like it does for turned threads.

Create Setup Plans with Dimensions

A new Setup Plan window is added enabling users to add dimensions or notes to create a drawing of a

setup lay-out or setup plan. The setup plan is stored in the VERICUT session and can be output in a VERICUT report.

AUTO-DIFF™ Precision

AUTO-DIFF enables users to automatically detect differences between a CAD design model to a VERICUT simulated cut part. The AUTO-DIFF Surface Range tables now include a value to represent surface cuts exactly matching (i.e. with no deviation from) the design model. A separate color can be designated for these features.

Additionally, the design model now moves with the cut stock as it transitions between setups. It also moves with the cut stock when the cut stock is manually moved via the Modeling window.

CAM Interface Updates

The CATIA V5-to-VERICUT Interface (CATV5) has been updated to:

- *enable selecting CATIA sub-programs.
- *retrieve cutting tool descriptions from CATIA Resources.
- *set the VERICUT working directory to the location specified in CATV5.
- *create no table entries, when desired.

The NX-to-VERICUT Interface (NXV) (formerly the Unigraphics-to-VERICUT Interface (UGV)) has been updated to:

- *support merging the tools in the current NXV session with those in the setup template.
- *remove Program Groups that a user does not want to export to VERICUT. Removed program groups are still saved with the NX part.
- *query the Geometry in NX to identify the CSYS names and add them to a pull down list for the "Program Zero To CSYS" on the Options menu.
- *no longer require specifying Model Location CSYS prior to selecting the operation's geometry (Part, Stock/Blank and Fixture/Check).
- *support TLDATA/GROOVE, LEFT/RIGHT, OUTSIDE/INSIDE, w, r1, r2, d, a1, a2, hh, hw in an NX CLS file.

Group Travel Limits

Travel Limits in both the G-Code Settings window and the Machine Settings window is enhanced to include soft limits, step limits and grouping. You can put conditions on travel limits and activate different groups of limits using Macros.

Additional Enhancements

VERICUT is enhanced to support milling on turning stock and is considered a valid cutting operation for any tool/stock orientation (on-center, or off-center). Full VERICUT support for such motions is implemented (X-Caliper, .vcs files, Model Export etc.).

Support is added for multi-axis water jet cutting operations.

VERICUT now supports pocket cycles in the XY, YZ, and ZX motion planes.

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Customer Breakthroughs Spotlighted at SolidWorks World 2008

21 January 2008

A revolutionary cancer treatment device. Next-generation snowboard bindings. An “exoskeleton” that helps the paralyzed walk. A solar-powered trash compactor. Robots for the masses. These products, all important advances and all developed with SolidWorks® 3D CAD software, wowed an audience of more than 4,600 this morning at the kickoff to SolidWorks World 2008.

“We know that the success of your companies, not to mention your own careers, hinges on the products you design,” SolidWorks Corporation CEO Jeff Ray said as he introduced the products. “If you have superior products like these, and I know many of you do, you will be successful and your company will be successful. We will continue to provide the tools you need to design them.”

Now celebrating its 10th anniversary, the SolidWorks World 2008 International User Conference & Exposition is the largest annual worldwide 3D CAD event. The record attendance reflects more than 50 countries, 100 partners, 140 journalists, 106 exhibiting organizations and more than 200 new products in the Product Design Showcase.

Also in this morning’s general session, Ray described a new product from Dassault Systèmes called 3DVIA™ Composer for creating product documentation and illustrations – including assembly instructions, 3D animations, user manuals, and marketing materials – from designs in SolidWorks and other 3D CAD formats. He earlier reviewed hard data demonstrating improvements in SolidWorks customer service and satisfaction.

“We will continue to listen to our customers and we will aggressively respond,” said Ray. “Our job is never done.”

Danny Forster of Discovery Channel’s “Build It Bigger” (<http://dsc.discovery.com/fansites/build-it-bigger/build-it-bigger.html>) show made a surprise appearance, delivering a visual presentation of stunning, potentially world-changing designs.

The conference continues through Wednesday.

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Dean Kamen Issues Mentorship Challenge to SolidWorks World 2008 Attendees

23 January 2008

Inventor, entrepreneur, and tireless advocate for science and technology Dean Kamen challenged thousands of product designers and engineers at SolidWorks World 2008 to mentor young robotics competitors and inspire the engineers of tomorrow.

“Adults line up in droves to help young athletes develop their skills in pursuit of jobs in professional sports,” Kamen told more than 4,600 attendees of the SolidWorks World 2008 International User Conference & Exposition, the largest annual worldwide 3D CAD event. “We need technology professionals to show kids they have more options – they need to help young people discover the excitement and rewards of education and careers in science and technology. In six weeks, a FIRST mentor can provide a student with learning and inspiration that can impact a lifetime.”

SolidWorks Vice President of Worldwide Marketing Rainer Gawlick joined Kamen on the stage and announced support of the program. SolidWorks Corporation will provide free software to any teacher

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who is a FIRST Robotics mentor and participates in an internship with an engineering organization over the summer. SolidWorks will also provide free software to any company mentoring a FIRST team for use with a teacher they invite to intern at their organization.

SolidWorks software is widely used among FIRST competitors, and mentorships will make it easier for more students to benefit, according to SolidWorks Corporation. “We want to join Dean Kamen in fostering the engineering community at its roots, the young people who will become tomorrow’s engineers and tackle some of the steepest challenges in history,” Gawlick said.

In addition to being an acclaimed inventor, Kamen is founder of the FIRST (For Inspiration and Recognition of Science and Technology) organization whose FIRST Robotics Competition helps students discover the rewards and excitement of science, engineering, and technology. More than 1,500 teams from Brazil, Canada, Chile, Israel, Mexico, the Netherlands, the U.K., and every state in the U.S. are participating in this year’s competition.

“You have all drawn on mentors,” Kamen told the engineers. “Otherwise, you wouldn’t be here. Please consider sharing your expertise.”

For information on FIRST Robotics mentoring, visit <http://www.usfirst.org/>. For information on teacher internships, visit <http://www.solidworks.com/FirstTeacher>.

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Delcam to Highlight Five-Axis Developments at Industrie

25 January 2008

Delcam will highlight new five-axis machining strategies in its PowerMILL and FeatureCAM CAM systems at the Industrie exhibition to be held in Paris from 31st March to 4th April. The company will also be promoting the range of services available from the new French division of its Professional Services Group. The UK division has been particularly successful with aerospace customers and the French division is planning a similar focus on the country’s aircraft industry.

The most significant of the new five-axis options in PowerMILL is a tool-axis editing function that allows the user to select any region of a toolpath and redefine the tool-axis vectors within that region. Previously, a single tool-axis specification was applied to a complete toolpath, although this could be adjusted automatically to avoid any collisions. The new ability to use different options in different regions of the toolpath will enable users to optimise cutting conditions and avoid any sudden machine tool movements that could result in a poor surface finish.

Five-axis swarf machining in PowerMILL has been improved by the addition of an option that forces the toolpaths to follow the surface internal lines where possible. This approach can be used to give smoother motion of the machine tool and more precise control of the machine, especially in tight corners and other areas where there could be rapid changes in the cutter orientation.

The new PowerMILL release also includes enhancements and speed-ups throughout the program. In particular, improved memory management within the software will give significantly faster calculation times, especially for large, complex components, like press tools for automotive bodywork, and for smaller, highly-detailed models, such as moulds for fine-tolerance and high-accuracy parts.

The new five-axis machining options in FeatureCAM 2008 offer a variety of methods for controlling the tool axis. The user is able to set a specific lead and/or lean angle – the lead angle is measured in the

cutting direction; the lean angle at right angles to the cutting direction. This can be done either to access areas unable to be reached with three-axis machining or to give better cutting conditions. Alternatively, the tool angle can be set in an orientation either to or from a point, or to or from a line.

Many three-axis toolpaths generated in FeatureCAM are able to be converted to a five-axis equivalent by using automatic collision avoidance to change the tool axis when collisions might occur. The software automatically tilts the cutter away from the obstacle by the specified tolerance and then returns the cutting angle to the value set for the overall toolpath once the obstacle has been cleared. Various choices are available to control the direction in which the tool is tilted.

Other new options include five-axis trimming and swarf machining. These techniques can be used for the finishing of composite components and vacuum-formed parts, and for machining pockets in aerospace structures.

Five-axis drilling is also supported. This new functionality, coupled with the advanced feature recognition in FeatureCAM, makes it possible to create drilling programs in seconds for multiple hole types and sizes, oriented in a variety of directions.

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GibbsCAM 2008 Previewed at WESTEC 2008; Enhancements to GibbsCAM overall with an additional focus on high speed machining

22 January 2008

Gibbs and Associates, developer of GibbsCAM[®] software for programming CNC machine tools and a Cimatron company, announced that GibbsCAM 2008 will be previewed at WESTEC 2008. This release introduces enhanced capabilities across the entire GibbsCAM product family, along with a complete range of 3-axis milling functionality with support for high speed machining. WESTEC is being held at the Los Angeles Convention Center in Los Angeles, California on March 31st – April 3rd, 2008.

“We continue to expand on GibbsCAM’s world class production machining capabilities,” states Bill Gibbs, founder and president of Gibbs and Associates. “With this release a majority of enhancements have been made to system core, so all GibbsCAM modules benefit from them. This ensures that all customers will receive considerable value with this release. In addition, there are new 3-axis surface machining capabilities that provide more control and flexibility in toolpath generation with integral high speed machining support. The new functionality is keeping with GibbsCAM’s tradition of uniquely blending ease-of-use and powerful functionality, a combination that can’t be beaten in production machining.”

Some of the more significant enhancements in the upcoming GibbsCAM 2008 release are:

- *Virtually unlimited undo/rollback capability
- *Multiple viewport display capability
- *Toolpath tool traversal visualization
- *Hidden line toolpath display
- *Pre-select highlighting
- *Expanded display color management

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*Persistent features and Feature Manager Interface

*Advanced 3D, high-speed machining for SolidSurfacer®

Support for 3D Material Only

Support for more advanced tool shapes (tapered tools)

New types of finishing processes (e.g. Surface Step-over Cut and Steep/Shallow Combination)

Improved toolpath quality

Options to provide toolpath that better supports High Speed Machining

Improved use of boundaries

Enhanced entry/exit control

Ability to directly machine Faceted bodies, including imported STL files

Automatic Core/Cavity detection for inside out or outside in determination

Operation splitting for tool wear and for optimal length out of holder

Multi-threaded for multi-CPU machines and to support batch toolpath generation

Automatic filleting of a surface to avoid sharp concave corners

For more information about GibbsCAM, GibbsCAM's production machining capabilities or to see the capabilities being introduced with GibbsCAM 2008, go to the GibbsCAM booth, #3268. Information about GibbsCAM is also available at the company's website, www.GibbsCAM.com.

In January 2008, Gibbs and Associates merged with [Cimatron Ltd.](http://www.Cimatron.com), and is now operating as a Cimatron company. For more information about Gibbs and Associates and its CAM software packages, call 1-800-654-9399, or visit the company on-line at www.GibbsCAM.com.

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ITI TranscenData to Hold Webinar Series: "Eliminating Model Rework through Automated CAD Repair"

24 January 2008

ITI TranscenData, the Product Data Interoperability division of International TechneGroup Incorporated (ITI), will host a series of one-hour technical webinars on the tools and techniques used to combat the labor waste associated with CAD model rework.

"Manufacturers are relying more on the supply chain for their design data," says Steve Utterdyke, North American Program Manager for 3D Solutions. "When you lose in-house design expertise, the CAE groups and tooling managers are the ones forced to work with the result. The amount of time these teams pour into reworking CAD data can cost days and weeks in production delays."

ITI TranscenData will waive the webinar fee for the following registration dates: February 12, 19, and 26. In addition, registrants will receive a copy of the seminar materials and a complimentary one-hour consultation with a Senior ITI TranscenData Engineer.

Enrollment is limited to 15 attendees per session.

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"Program content is designed and delivered by our CAD repair specialists," affirms Don Hemmelgarn, President of ITI TranscenData.

"Essentially, we are offering attendees an educational experience and a one-on-one opportunity to consult directly with our experts."

Who Should Participate?

Engineers and engineering managers that leverage both native and neutral CAD formats in their design, manufacturing, and analysis processes are encouraged to participate. Using live CAD data and interactive demonstrations, attendees will gain insight and exposure to timesaving CAD repair techniques.

Registration / Information

For more information, or to receive your attendee access code, please visit

<http://www.transcendata.com/company/webinar.php%20> or call Shawna Rockwood at 888-783-9199 ext. 3848.

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Mastercam Showcasing Two Major Releases at Westec 2008

January 2008

Westec 2008 features the unveiling of two major developments in CNC Software's Mastercam CAD/CAM software. Attendees will get the first look at Mastercam's new Feature Based Machining (FBM) as well as the Mastercam for SolidWorks add-in. Both will be showcased in booth # 3258 at the Los Angeles Convention Center in Los Angeles, CA on March 31 – April 3, 2008.

Feature-Based Machining (FBM)

Mastercam's new Feature-Based Machining automates the machining process. This offers shops dramatic speed improvements and allows for great reductions in programming time. Mastercam's FBM will automatically evaluate the part and program pockets, contours, bosses, and drilling routines with minimal user input. New users to Mastercam will be machining 2D solid parts sooner thanks to FBM's ease of use and short learning curve.

Mastercam for SolidWorks

Mastercam for SolidWorks is fully integrated CAM that runs seamlessly in SolidWorks. SolidWorks users can now program their parts directly within SolidWorks using Mastercam's toolpaths and machining strategies.

Mastercam's latest release, X2MR2 will also be demonstrated in the booth. Stop by to learn about the [Mastercam X2](#) features including:

- The new Peel Milling toolpath moves the tool in and "peels" away material, layer by layer.
- The Operations Manager pane can now float to a different area of the graphics window or to a separate screen when you are working with dual monitors.
- The Create Boundary function greatly expands Mastercam's toolpath boundary creation, restricting the toolpaths to highly specific areas.
- Many powerful multiaxis enhancements are included in the advanced multiaxis toolpaths.

- Common edge optimization in nesting is now supported.

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Noran Engineering Shows Nastran Virtual Product Test Software at the 2008 Pacific Design Show

21 January 2008

Noran Engineering, Inc. (NEi) will demonstrate how pre and post processors Femap®, NEiFusion™, and NEiWorks™ powered by new features in NEi Nastran™ solvers assist both designers and FE analysts perform simulations faster, easier, and with better real world fidelity. Digital prototyping technology developed by NEi enables product developers to determine the response of parts and assemblies to structural and thermal loads early in the design cycle saving time, money, and resources on physical prototypes, test programs, and redesigns. NEi's products have been cited in several trade magazines for technical merit. Most recent, NEi received Design News magazine's Golden Mousetrap Award for Best New Analysis and Calculation Software

New virtual testing tools in NEi's portfolio include: Automated Impact Analysis and Drop Test (AIATM), Design Optimization, Automated Surface Contact Generation (ASCGTM), Automated Edge Connection Generation (AECGTM), and hyperelastic and composite material modeling. AIA is used in a variety of areas from military projectiles to product packaging to drop testing of consumer electronic products like cellphones. Design Optimization finds solutions for complex designs with conflicting parameters e.g. structures that must be both strong and light. ASCG provides real world fidelity in modeling assemblies. AECG is a major productivity tool that significantly speeds model creation for shell type structures like, cars, ships, and aircraft. Hyperelastic capabilities allow modeling of rubber like materials.

[NEi](#) is at Booth # 3505 at the Pacific Design and Manufacturing Show, January 29 – 31, 2008 at the Anaheim Convention Center, Anaheim, CA. NEi invites attendees with an interest in virtual test software to sign up prior to the show at www.NENastran.com/PDM2008 so material may be prepared that can address their specific application.

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Financial News

Endeca Receives Investment from SAP Ventures

23 January 2008

[Endeca Technologies, Inc.](#), announced that it has secured financing from SAP Ventures.

"Visibility into enterprise-wide information assets is a key area of interest for customers," said Jennifer Scholze, Investment Partner at [SAP Ventures](#). "By taking a fundamentally new approach to accessing and analyzing enterprise-wide data, Endeca is poised to disrupt multi-billion dollar markets and is uniquely suited to address the core opportunity of the information economy."

"No company better understands the importance of enterprise data to today's information-centric businesses than SAP. Our collaboration will open new doors and accelerate the realization of our vision to arm all knowledge workers with the critical enterprise data they need to inform daily decision making, regardless of source or format," said Steve Papa, chief executive officer of Endeca. "As an SAP

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customer and now a key part of their investment portfolio, Endeca is on a favorable path to learn from -- and work closely with -- the most influential information applications company of our time.”

Headquartered in Cambridge, MA, Endeca has operations in North America, Europe and Asia. For more information: <http://endeca.com> or info@endeca.com.

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Intel Capital Invests \$10 Million in Endeca

23 January 2008

[Intel Capital](#) announced that it invested \$10M in Endeca Technologies, Inc., an information access software company. The funds will allow Endeca to accelerate research and development efforts as well to expand its global operations.

“Information access platforms play a crucial role in linking vast collections of data,” said Arvind Sodhani, president of Intel Capital. “Our investment in Endeca will further their capabilities by capitalizing on Intel’s next generation multi-core platforms in this market segment.”

“Endeca’s success to date would not have been possible without the innovations Intel has brought to market. Multi-core computing will play one of the greatest enabling roles for adoption of next generation information access technology,” said Steve Papa, CEO of Endeca. “This investment from Intel Capital has the potential to accelerate Endeca’s success in gaining adoption for information access.”

Endeca’s innovative information access software helps people explore, analyze and understand complex information. The Endeca Information Access Platform, built around a new class of access-optimized database, features sub-second query performance and supports extreme scale. As a result, organizations can unlock latent value of current information investments and rapidly deploy new classes of intuitive information access applications to a wide audience of users.

"We recognize the value of Endeca’s solution to accelerate the speed in which companies consume information and make decisions," said Lisa Lambert, managing director of the Software and Solutions Group, Intel Capital. "The company's comprehensive product offering, consistent growth, and high customer return-on-investment as measured by repeat sales, position Endeca to be the leader in the next generation of information access and analysis software. The investment also illustrates our steady support for emerging technologies in all economic landscapes."

Headquartered in Cambridge, MA, Endeca has operations in North America, Europe and Asia. For more information: <http://endeca.com> or info@endeca.com.

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Moldflow to Release Second Quarter Fiscal 2008 Financial Results on February 7, 2008

23 January 2008

Moldflow Corporation announced that it expects to release second quarter fiscal 2008 financial results on February 7, 2008. In addition, the Company will hold a conference call conducted by Roland Thomas, president and CEO, and Gregory Magoon, executive vice president of finance and CFO at 11:00 a.m. Eastern time to discuss second quarter results.

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What: Moldflow Second Quarter Fiscal 2008 Earnings Conference Call

When: 2/7/08 at 11:00 a.m. Eastern time

Where: <http://www.moldflow.com>

Click on Investors, then Audio Presentations

The conference call dial-in number is 877-314-4022, Conference ID #32298612. The call will be recorded with replay (dial-in # 800-642-1687, Pin #32298612) which will be available until February 14, 2008.

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PTC Reports First Quarter Fiscal Year 2008 Results

23 January 2008

PTC reported GAAP revenue of \$241.2 million for the first quarter ended December 29, 2007, up 9% from the same period last year. Non-GAAP revenue for the first quarter was \$242.5 million. Non-GAAP revenue excludes the effect of purchase accounting on the fair value of the acquired deferred maintenance revenue balance of CoCreate Software GmbH, which PTC acquired during the first quarter.

“We performed well in the first quarter,” said C. Richard Harrison, president and chief executive officer. “Our focus on delivering significant operating margin improvement in 2008 has begun to pay off. We delivered an 18.2% non-GAAP operating margin in the first quarter, a 330 basis point improvement from the same period last year. Our continued efforts to evolve our distribution and services models, our globalization strategy, and the immediate non-GAAP operating margin accretion provided by CoCreate contributed to this improvement. In addition, we continue to deliver revenue growth that is higher than market growth rates.”

GAAP operating income for the first quarter of 2008 was \$14.9 million, or 6.2% of total GAAP revenue, compared with \$21.0 million, or 9.5% of total GAAP revenue in the year-ago period. GAAP net income for the first quarter of 2008 was \$9.9 million, or \$0.08 per diluted share, compared with GAAP net income of \$15.2 million, or \$0.13 per diluted share, in the year-ago period. Non-GAAP operating income, which excludes the effect of purchase accounting on the acquired deferred maintenance revenue balance of CoCreate, stock-based compensation cost, restructuring charges, amortization of acquisition-related intangible assets, and in-process research and development write-offs associated with acquisitions, was \$44.1 million for the first quarter of 2008, or 18.2% of total non-GAAP revenue, compared with \$33.0 million, or 14.9% of total GAAP revenue, in the year-ago period. Non-GAAP net income, which excludes the items excluded from non-GAAP operating income and the related tax effect of those items, was \$31.1 million for the first quarter of 2008, or \$0.26 per diluted share, compared to \$26.8 million in the year-ago period, or \$0.23 per diluted share.

PTC’s GAAP and non-GAAP results for the first quarter of fiscal 2008 include expenses of \$3.2 million associated with its restatement of the third quarter of 2007 and prior financial results announced and completed during the quarter. As previously reported, PTC reversed its valuation allowance against deferred tax assets in the U.S. and a foreign jurisdiction in the third quarter of 2007. Therefore, the GAAP and non-GAAP effective income tax rates of 40% and 32%, respectively, in the first quarter of 2008 are higher than the GAAP and non-GAAP effective income tax rates of 30% and 21%, respectively, in the first quarter of 2007. We have provided more information about the impact of this change in the attached financial tables.

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Cash and cash equivalents were \$215 million at the end of the first quarter of 2008, ahead of expectations. PTC used \$50 million of cash during the quarter to help finance the acquisition of CoCreate and also repaid \$15 million of the \$220 million borrowed under its revolving credit facility to finance the rest of that transaction. Cash flow from operations was \$16.7 million for the first quarter, ahead of expectations primarily due to strong cash collections during the quarter.

First Quarter 2008 Revenue Metrics

PTC delivered the following results for the first quarter of fiscal 2008 compared to the same period in 2007 (based on GAAP revenue):

- Total revenue growth of 9%, which reflects both organic revenue growth and revenue from acquired businesses. Maintenance revenue grew 13%, training and consulting service revenue grew 10% and license revenue grew 1%. License revenue reflects increased sales of new seats and/or increased revenue from new seats of our major product offerings (Pro/ENGINEER, Windchill, Arbortext, and Mathcad), offset by a decline in revenue from Pro/ENGINEER upgrades and modules;
- Total revenue from our reseller channel of \$59.5 million, up 26%, reflecting continued success in the SMB market around the world for our organic products, as well as the addition of CoCreate channel revenue;
- Revenue growth of 23% in Europe, 7% in the Pacific Rim, and 3% in Japan, partially offset by a 2% decline in North America.

In the first quarter, PTC received orders from or on behalf of leading organizations including Airbus S.A.S.; Carrier Corporation; Gates Corporation; ITT Industries; Lockheed Martin Corporation; Shanhaiguan New Shipbuilding Industry Company Ltd.; Sulzer Pumps Ltd.; Toyota Motor Corporation; the United States Navy; and Volvo Group.

“We remain confident in our ability to achieve our Fiscal 2008 targets of \$1,060 million in non-GAAP revenue and non-GAAP operating margins of at least 22%,” continued Harrison. “We are mindful of current investor concerns about the economy. However, our forecast continues to support our confidence in our ability to execute our plan. We believe we are the best-positioned PLM vendor to support customers with business initiatives that enable cost reduction, such as global product development and IT consolidation. These customer initiatives have been driving investment in our solutions for at least two years, and we believe customers would only accelerate them in a more difficult economic environment.”

Second Quarter and Fiscal Year 2008 Financial Outlook

PTC’s GAAP revenue forecast for the second quarter of fiscal 2008 is between \$248 million and \$258 million, and GAAP earnings per diluted share are expected to be between \$0.10 and \$0.14. PTC expects non-GAAP second quarter revenue to be between \$250 million and \$260 million, and expects non-GAAP earnings per diluted share to be between \$0.24 and \$0.28. The non-GAAP revenue and earnings expectations exclude the effect of purchase accounting on the acquired deferred maintenance revenue balance of CoCreate of about \$2 million and the following second quarter estimated expenses and their tax effects:

- Approximately \$12 million of expense related to stock-based compensation
- Approximately \$8 million of acquisition-related amortization expense
- Approximately \$3 million of restructuring expenses related to our continued globalization program

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For the fiscal year ending September 30, 2008, PTC expects GAAP revenue to be about \$1,055 million and GAAP earnings per diluted share to be between \$0.66 and \$0.77. PTC expects non-GAAP revenue to be about \$1,060 million and non-GAAP earnings per diluted share to be between \$1.17 and \$1.27 for the fiscal year. The non-GAAP revenue and earnings expectations exclude the effect of purchase accounting on the acquired deferred maintenance revenue balance of CoCreate of about \$5 million and the following full-year estimated expenses and their tax effects:

- Approximately \$45 million of expense related to stock-based compensation
- Approximately \$32 million of acquisition-related amortization expense
- \$1.9 million of in-process research and development expense related to acquisitions completed in the first quarter of 2008
- Approximately \$15 million of restructuring expenses related to the continued globalization program

PTC has changed its assumptions for our future GAAP and non-GAAP tax rates. Previously, our 2008 guidance reflected an assumption that our GAAP and non-GAAP effective income tax rates would be approximately 40%. The current guidance reflects an assumption that our GAAP and non-GAAP effective income tax rates will be 37.5%. Additionally, upon the close of the CoCreate acquisition, our estimate was that the acquired deferred maintenance revenue fair-value write-down related to that transaction would impact our GAAP revenue by about \$10 million in Fiscal 2008. Upon completion of our preliminary purchase accounting for the transaction, our current expectation is that it will impact our GAAP revenue by about \$5 million in Fiscal 2008. This is reflected in the guidance above.

Important Information about Non-GAAP References

To supplement our financial results presented on a GAAP basis, we use non-GAAP measures, which exclude certain business combination accounting entries and expenses related to acquisitions as well as other expenses including stock-based compensation and restructuring charges, that we believe are helpful in understanding our financial results and our projected future financial performance. PTC believes these non-GAAP measures aid investors' overall understanding of PTC's results by providing a higher degree of transparency for certain financial measures and providing a level of disclosure that helps investors understand how PTC plans and measures its own business. We believe that providing non-GAAP measures affords investors a view of our operating results that may be more easily compared to peer companies and enables investors to consider PTC's operating results on both a GAAP and non-GAAP basis in periods when PTC is engaged in acquisition activities or undertaking restructuring activities. However, non-GAAP revenue, non-GAAP operating income, non-GAAP net income and non-GAAP earnings per share should be construed neither as an alternative to GAAP revenue, GAAP operating income, GAAP net income or GAAP earnings per share as an indicator of our operating performance nor as a substitute for cash flow from operations as a measure of liquidity because the items excluded from the non-GAAP measures often have a material impact on PTC's results of operations. Therefore, management uses, and investors should use, non-GAAP measures in conjunction with our reported GAAP results.

Our management regularly uses our supplemental non-GAAP financial measures internally to understand, manage and evaluate our business and to make operating decisions. These non-GAAP measures are among the primary factors management uses in planning for and forecasting future periods. In addition, compensation of our executives is based in part on the performance of our business based on these non-GAAP measures. Our non-GAAP financial measures reflect adjustments based on the following items, as well as the related income tax effects:

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- **Deferred maintenance support revenue:** Business combination accounting rules require us to account for the fair value of support contracts assumed in connection with our acquisitions. Because these are typically one-year contracts, our GAAP revenues for the one-year period subsequent to our acquisitions do not reflect the full amount of software license updates and product support revenues on assumed support contracts that would have otherwise been recorded by the acquired entities. The non-GAAP adjustment, reflected in non-GAAP revenue, is intended to reflect the full amount of such revenues. We believe this adjustment is useful to investors as a measure of the performance of the acquired business in the current fiscal year and provides a basis for comparing maintenance revenue in subsequent fiscal years which are not impacted by the GAAP purchase accounting adjustment.
- **Stock-based compensation expense:** We exclude the effect of stock-based compensation expense from our non-GAAP operating expenses, operating margin and net income. Although PTC undertakes analyses to ensure that its stock-based compensation awards are in line with peer companies and do not unduly dilute shareholders, PTC allocates these awards and measures them at the corporate level. Management excludes their financial statement effect when planning or measuring the periodic financial performance of PTC's functional organizations since they are unrelated to our core operating metrics. Stock-based compensation expense will recur in future periods.
- **Amortization of intangible assets and acquired in-process research and development expenses:** We exclude the effect of amortization of intangibles and in-process research and development expenses from our non-GAAP operating expenses and net income. We believe that excluding these expenses, which are associated with acquisitions, provides investors with information that helps to compare period-over-period operating performance by highlighting the effect of acquisitions on our results of operations. In addition, PTC's management excludes the financial statement effect of these items in creating operating budgets for PTC's functional business units and in evaluating and compensating employees due to the fact that it is difficult to forecast these expenses because the expense is inconsistent in amount and frequency and is significantly affected by the timing and size of our acquisitions. Amortization expenses will recur in future periods. In-process research and development charges are not recurring with respect to past acquisitions, but we may incur these expenses in connection with future acquisitions.
- **Restructuring expenses, which consist of PTC employee severance and PTC duplicate facility closures in connection with our strategy to globalize our workforce to improve our profitability:** We believe it is useful for investors to understand the effect of these expenses on our cost structure. Although restructuring costs are not recurring with respect to past severance and facilities closure activity, we may incur these expenses in the future in connection with continued execution of our globalization strategy.
- **One-time tax items, if any:** We exclude the effect of certain one-time tax items, such as valuation allowance reversals, from our non-GAAP net income. We believe that excluding certain one-time tax items provides investors with information that helps to compare period-over-period operating performance by highlighting the effect of one-time items on our results of operations. There were no such items in the first quarters of 2008 and 2007.

Earnings Call Webcast

PTC will provide detailed financial information and an outlook update on its first quarter fiscal year 2008 results conference call and live webcast on January 23, 2008 at 10 a.m. ET. This earnings press release and accompanying financial and operating statistics will be accessible prior to the conference call and webcast on PTC's web site at www.ptc.com/for/investors.htm. In addition, the live webcast may be accessed at the same web address. To access the live call, please dial 888-566-8560 (in the U.S.) or

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+1-517-623-4768 (international). Please use passcode PTC. A replay of the call will be available until 5:00 p.m. ET on January 28, 2008. To access the replay via webcast, please visit www.ptc.com/for/investors.htm. To access the replay by phone, please dial 402-220-9786 .

PTC's unaudited consolidated statements of operations and the unaudited condensed consolidated statements of cash flows for the first quarter fiscal 2008 are attached.

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Sopheon Trading Update

25 January 2008

Sopheon plc announced that it expects total revenues for 2007 to be of the order of £6.3 million compared to just over £6.0 million in 2006.

While emphasizing that the year-end close process is far from complete, and is complicated by the impact of the acquisition of Alignment, our initial workings indicate that the Group's EBITDA result will again come in around the breakeven level.

Sopheon's annual recurring revenue base has now grown to over £2.5 million. Adding committed services business to this recurring base means that we entered 2008 with full year revenue visibility at £3 million. Furthermore, in addition to new opportunities, a number of substantial transactions that were not closed in 2007 continue to progress well and we remain confident that they will complete in the first quarter of 2008.

Financial expectations noted above are subject to the completion of the year-end financial close and audit processes. Sopheon plans to issue its 2007 preliminary results on 27 March 2008.

Barry Mence, Chairman, commented:

“We had expected a stronger finish to 2007, but continue to anticipate substantial growth in our business. The acquisition of Alignment has bedded down well and has strengthened our strategic position. We have a great platform to build from, and continue to drive forward with determination and confidence.”

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Implementation Investments

Arizona Public Service Selects Autodesk Utility Solution to Meet Increased Design Workload

22 January 2008

Autodesk, Inc. announced that Arizona Public Service (APS) has selected Autodesk to provide utility transmission and distribution design software and consulting services that will help modernize design processes for its electric distribution system, resulting in an expected 25 percent increase in productivity. The Autodesk solution will streamline the business processes across the design, build, operate and maintain life cycle; improve data flow and accuracy; and reduce backlogs.

As the largest publicly owned utility company in Arizona, APS serves more than 1 million customers-a number expected to grow by more than 3 percent annually. To manage its expanding transmission and distribution (T&D) infrastructure and capacity growth, APS is developing an integrated distribution

CIMdata PLM Industry Summary

operations management system (DOMS) that will include an efficient, real-time data management system. As this integrated DOMS is built out, real-time accurate and consistent design information will become critical for APS to operate its T&D system.

"We chose Autodesk because it offers a technology platform that will help us meet the long-term demands of our region's growth," said Scott Gudeman, T&D business integration manager for APS. "Autodesk's full-scale solution is the first step toward creating an integrated system that leverages our engineering design information in the processes to build, operate and maintain our assets.

Additionally, Autodesk's consulting services will provide us with the configuration and training needed to get the system up and running almost immediately."

Currently, APS' design processes rely on a variety of systems and require manual interfaces to leverage engineering design information across GIS, work management and material ordering systems. By streamlining this process and implementing an open, standards-based design tool, APS will eliminate many time-consuming activities and improve the accuracy of its design and material orders.

"APS selected our solution for the same reason that companies like Southern California Edison and FirstEnergy selected Autodesk: we understand utility design, engineering and asset management," noted Lisa Campbell, vice president, Autodesk Geospatial Solutions. "Thousands of electric, gas and water utilities use Autodesk software to design, build and manage their network infrastructure. By integrating high-precision designs with their asset management and geospatial software, utilities can reduce their operating costs and improve service levels."

Creating an Intelligent Design Process

The Autodesk Utility Design (AUD) solution provides APS with a framework to maximize the value of its engineering design information by applying it to the analysis and building processes. This solution, which includes standard business rules for engineering activities, will also enhance integration of design data with APS' GIS system. By implementing this solution, APS will streamline many cross-divisional operations, allowing staff to:

- *Create consistent, intelligent design using standard templates, engineering calculations and material orders.
- *Improve data integrity through improved process and integration.
- *Turn infrastructure designs around more quickly, helping APS meet the demands of expanding and updating Arizona's electric infrastructure.
- *Capture existing institutional knowledge in the system, helping newer, less experienced employees get up to speed quickly.

About Arizona Public Service

APS, Arizona's largest and longest-serving electric utility, serves more than 1 million customers in 11 of the state's 15 counties.

For additional information about Autodesk, visit <http://www.autodesk.com/>.

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AVEVA Solutions to be Used in World's Fourth Biggest Shipyard

22 January 2008

AVEVA announced that one of Korea's leading shipbuilders, Hanjin Heavy Industries & Construction-Tech, Inc. has signed a multi-million USD agreement with AVEVA to equip their new shipyard in the Philippines with AVEVA Marine solutions and AVEVA NET.

[Hanjin](#) has invested USD720 million constructing the shipyard in Subic Bay, Philippines. Phase One of the Subic Dockyard which includes a 1,000-m assembly line, 2 ultra-huge gantry cranes and a 1.6-km quay wall has been completed. Total shipbuilding capacity for this phase is 220,000 tons/year. Phase Two due for completion in the 2nd half of 2008 will boost capacity by an extra 450,000 tons/year.

ChoonBae Jeon, Manager of Technical Team, Hanjin Heavy Industries & Construction-Tech, Inc., said: "The new shipyard in the Philippines is based on our strategy to overcome growth limits because of limited space in our local shipyards. We will be adopting AVEVA Marine solutions and AVEVA NET which are effectively in use in our Youngdo, Ulsan and Masan shipyards in South Korea."

Peter Finch, President, AVEVA Asia Pacific, said:

"We are sure that the efficiency at the high-tech Subic Dockyard will be further enhanced with the implementation of our solutions. Moreover, we are certainly proud that AVEVA's solutions will play a major role in the design and construction of the world's largest ship being built at Subic."

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AVEVA Wins Contract with Leading Japanese Shipbuilder

22 January 2008

[AVEVA](#) has won a contract worth £4 million to equip a major Japanese shipyard with AVEVA Marine solutions.

AVEVA's key strengths in providing best-in-class solutions for the shipbuilding industry are of prime importance to the shipyard, which accounts for 7% of the world's annual shipbuilding tonnage.

Peter Finch, President of AVEVA Asia Pacific, said:

'This reflects the success of our strategy to attract new customers with our engineering tools, which reduce costs, accelerate timescales and maximise performance.'

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Citizen Watch Shortens Product Design Processes with Dassault Systèmes

22 January 2008

Dassault Systèmes (DS) announced that Citizen Watch Co. Ltd. has implemented ENOVIA SmarTeam's product lifecycle management software and SolidWorks 3D CAD software as part of a company-wide transition from 2D to 3D product design.

"We aim to reduce costs and development time by 30 percent using SolidWorks for product design and ENOVIA SmarTeam for data collaboration," said Masayuki Watanabe, assistant manager section 2, business process management dept, watch business control center, Citizen Watch Co., Ltd. "We're very satisfied with the usability and direction of SolidWorks 3D CAD." A faster design process that

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encouraged innovation was a key goal for Citizen in choosing a PLM system as it sought an effective way of maintaining a steady stream of new products while staying ahead of the heavy competition in the watch industry.

Citizen Watch Co., Ltd uses ENOVIA SmarTeam as the central repository for product information created in SolidWorks 3D CAD software. Consolidating all product information in ENOVIA SmarTeam enabled Citizen to institute collaborative design processes that shorten the design process. Using ENOVIA SmarTeam's concurrent engineering processes, multiple designers can now work on the same project at the same time without risk of conflict or error because they are referring to the same product information files.

ENOVIA SmarTeam users at Citizen Watch Co., Ltd. share product data in real-time across processes such as design, production engineering and manufacturing. Collaboration throughout the process enables the design teams to create products that are easy to manufacture. Designers spot and correct problems virtually, rather than in prototyping or production.

“We are proud to have enabled a high-end customer such as Citizen Watch Co., Ltd. to produce high quality products that are quick and affordable to develop,” said Alex Zeltcer, general manager, ENOVIA SmarTeam, Dassault Systèmes. “Citizen Watch has taken a phased approach to PLM, gradually and cost-effectively deploying a PLM program over time, with real business benefits at every phase. With flexible and robust PLM functionality, we offer customers an opportunity to achieve a substantially low total cost of ownership.”

“It's rewarding that a company like Citizen Watch Co., Ltd., so focused on precision and advancing the quality of its products, has standardized on SolidWorks as the foundation of its PLM strategy,” said Rainer Gawlick, vice president of worldwide marketing for SolidWorks Corporation. “We are committed to helping companies like Citizen embrace 3D design in way that leverages the considerable expertise they've developed in the 2D world.”

ENOVIA SmarTeam and Citizen Watch will be speaking and presenting at SolidWorks World 2008, San Diego, January 20-23, booth # 719. For further details, visit

<http://www.solidworks.com/pages/swworld08>

For more information, visit <http://www.3ds.com>.

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EADS-CASA Reduces Time in Aircraft Ground Vibration Testing with LMS Test.Lab

24 January 2008

[LMS](#) announced that EADS-CASA has implemented LMS Test.Lab to accelerate its processes for ground vibration testing. This aircraft testing process includes a series of tests to detect the aircraft resonances as a verification of the aircraft safety and reliability before the first actual test flights. The LMS Test Lab Ground Vibration Testing (GVT) solution includes integrated testing and analysis software and is based on interconnected LMS SCADAS III data acquisition front-ends adding up to over 700 channels. This represents one of the largest channel count systems for aerospace dynamic testing. EADS-CASA co-operated with LMS Engineering Services and Alava Ingenieros, LMS' representative in Spain, to gain an in-depth understanding of best practices in ground vibration testing and to accelerate the deployment of the LMS Test.Lab solution.

Based in Madrid, Spain, EADS- CASA Military Transport Aircraft Division (EADS- CASA MTAD) is

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a division of EADS, the European Aeronautical Defense and Space Organization that develops and manufactures aircraft and space systems. EADS-CASA deployed the LMS GVT systems to support the development of the Airbus A330 Multi Role Tanker Transport (MRTT), the aerial refueling tanker aircraft based on the civilian A330 aircraft. The role of the system is especially important in identifying structural resonances and validating flutter models on the A330 MRTT. To support this, the LMS Test.Lab solution delivers a tight integration of all the ground vibration methods, including mode appropriation, stepped sine, swept sine and random testing.

The extensive channel count of the LMS GVT system enables EADS-CASA to make all measurements for a complete aircraft configuration in a single test instead of the multiple series of tests required previously. This saves considerable time and reduces the risk of set-up mistakes and data management errors. In addition, on-line monitoring enables engineers to view results in real time as tests are being run. EADS-CASA engineers can check the validity of measurements and correlate test data with simulation results on the spot instead of waiting hours or days for lengthy post-processing. In this way, engineers can immediately identify the root cause of problems and better determine corrective actions.

Animation tools such as deflection shapes show how parts bend and twist at various frequencies, and the LMS PolyMAX tool analyzes modal test data to identify resonances. PolyMAX also yields more accurate and consistent results independent of subjective judgments of individual engineers. In the frequency band under investigation, the modes are very close to one another. Quickly identifying the critical modes represents an important challenge for the engineering team. The integrated LMS Test.Lab GVT solution offers the ability to quickly find and identify the critical modes in a reliable way, enabling the company to significantly shorten the turnaround time for these critical tests.

To support the complex deployment of the GVT system in a time-critical aircraft development process, EADS-CASA decided to rely on LMS Engineering Services. A dedicated project team of Alava Ingenieros and LMS engineers supported the deployment of the LMS Test.Lab system, through a careful system installation and integration, extensive user training and on the job assistance. In addition, EADS-CASA and LMS cooperated to exchange know how and best practices regarding the application of multiple excitation techniques like mode appropriation, stepped sine, swept sine and random testing. Overall, the LMS Test Lab Ground Vibration Testing solution and the successful deployment and technology transfer project allowed EADS-CASA to realize considerable savings in time and resources on the Airbus A330 MRTT project.

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Edge Products Tightens Change Control Processes and Cuts Product Return Rates by Over 50% with Omnify Empower PLM

22 January 2008

Omnify Software announced that Edge Products, a premier manufacturer of aftermarket performance electronics for the gas and diesel truck, and Jeep markets, is using Omnify Software to tighten engineering change control processes and meet fast development requirements.

Edge Products recently brought on a new management team that identified a need for improved change and part control processes. Edge is a rapidly growing company and the nature of their products requires fast development cycles. If a vehicle manufacturer makes a change to an existing product, Edge must react quickly, often with a change to their products. These changes can occur as often as weekly.

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"We recognized the need for a system that would require us to be more rigorous in our change control process and provide the kind of history and documentation that is necessary to ensure the quality we are committed to," stated Gerrit Kruitbosch, vice president of engineering for Edge Products. Edge's previous manual engineering processes were not conducive to this constantly changing product design environment. The company wanted to implement electronic processes for easy access to product information and improved efficiency.

Edge was looking for a Product Lifecycle Management (PLM) system to remove the paperwork burden and provide a complete documentation trail. They searched specifically for a system that included engineering change, Bill of Material (BOM) and documentation management. Direct integration with their existing ERP system, Sage MAS 90 ERP, was a necessity. They wanted a flexible solution that could be easily adapted to their internal company practices such as part numbering schemes and revisions. Edge also needed a PLM system with robust search capabilities and ease-of-use to get the company up and running quickly.

"We reviewed several of the key PLM vendors and were quite satisfied with the way Omnify provided solutions to meet our specific needs," continued Kruitbosch. As a result of implementing Omnify Empower PLM, Edge now has the ability to store all relevant product information in one location. Electronic change control has provided a more thorough review and sign-off process. The direct sharing of part and BOM information between Empower PLM and Sage MAS 90 ERP eliminated manual data entry errors and ensures accuracy of product change information across the enterprise. In addition, product quality has increased resulting in a major reduction in product returns. "Omnify has been a significant contributor to a 50% reduction in our product return rates," confirmed Kruitbosch.

"The Omnify PLM solution is ideal for manufacturers with complex products that require a large number of changes," said Chuck Cimalore, CTO for Omnify Software. "Omnify's change management facility and workflow engine support efficient engineering change control processes and helps customers like Edge react quickly to product changes and maintain high quality products".

For additional product information, including pricing, please call 978-988-3800, email info@omnifysoft.com or visit <http://www.omnifysoft.com>.

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Enersource Selects SmartGrid Solution from Intergraph and Siemens

23 January 2008

[Enersource](#) Hydro Mississauga, one of the largest distributors of electricity in Ontario, Canada, has signed with [Intergraph](#) to integrate and automate the various assets and functions of its power grid. The new SmartGrid implementation will result in greater efficiency and safety, as well as more reliable power to Enersource customers.

"Traditionally, we have been forced to work across multiple sources of information, including paper maps, to obtain a complete view of our distribution system," said Raymond Rauber, VP Engineering & Operations at Enersource Hydro Mississauga. "By working with Intergraph and Siemens to develop an Integrated Operating Model (IOM) for our power grid, we will be able to work more efficiently under both normal and storm conditions, as well as ensure that we are utilizing the most up-to-date, accurate information. The IOM implementation will allow us to meet the growing energy demands of tomorrow without sacrificing the exclusive service and safety we've been providing for the past 90 years."

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Enersource's IOM solution will combine Intergraph's utilities applications with Siemens' Distribution System Power Flow (DSPF) application to create an integrated command-and-control environment. Intergraph will fuse its InService outage management capabilities with geospatial and other data it provides on Enersource's infrastructure and 865,000 assets including transformers, utility poles, meters, conductors and others, as well as network devices, meters and other sensor data. In addition, Intergraph will combine information from Enersource's applications including its SCADA and customer information systems for use with the Siemens DSPF engine. Intergraph will then integrate all the data into a unified command-and-control environment that will provide easily-visualized, actionable intelligence manifested in the form of alarms, events, work orders and other understandable activities, allowing for quick detection and remediation of outages and other potential issues.

Siemens' Distribution System Power Flow application provides utilities with real-time analysis to make operations decisions on-the-fly, thus allowing more efficient management of electricity across a dynamic grid. With the DSPF technology, utilities have increased knowledge of load and voltage conditions to help them more safely, quickly and reliably reconfigure their networks and restore power.

"Joining with Enersource marks a significant milestone in Intergraph's leadership of the SmartGrid movement," said Jay Stinson, vice president of Intergraph Utilities & Communications. "We first joined with Siemens in May 2007 to build a SmartGrid system for Oncor Electric Delivery. Since then, we have observed growing interest among leading utilities like Enersource in modernizing their systems with 'smart' or 'intelligent' technologies. Moving forward, Intergraph and Siemens plan to work together to empower additional utilities with commercial off-the-shelf solutions for creating intelligent grids to meet emerging market needs."

"Siemens is pleased to further our efforts in SmartGrid technology through a continued relationship with Intergraph and a new agreement with Enersource," said Kevin Sullivan, vice president and general manager of Siemens Power Transmission & Distribution, Inc.'s Energy Management & Automation division. "The SmartGrid brings tremendous benefits to utilities, beginning with the reduction of and more efficient response to potentially-devastating outages, but also extending into many other key focus areas including cost savings, safety, environmental impact and the identification of potential security threats. In the future, the SmartGrid will play an invaluable role in helping utilities monitor the health of their networks and make better, faster, more informed decisions."

Enersource also utilizes an Intergraph application for plant engineering document management and for the issuance of device numbers. Intergraph ensures an open, independent data storage system to protect plant information for the life of a plant. Through a combination of geospatial technologies, Intergraph will provide Enersource with a comprehensive set of applications for managing and acting on critical data – from plant design to distribution operations.

For decades, Intergraph has been leveraging its geospatial technology and deep industry expertise to help utilities companies visually organize and manage assets and resources. The SmartGrid is the latest evolution of Intergraph's years of service to the utilities industry.

About Siemens Power Transmission & Distribution (USA)

Siemens Power Transmission & Distribution, Inc., headquartered in Raleigh, NC, creates innovative product, system and service solutions for its customers – electric utilities, transmission organizations, Independent System Operators, and large energy consumers. It is a leading supplier of high and medium voltage power delivery equipment, energy management systems, network planning and power system engineering software for regulated and deregulated generation, transmission and distribution markets.

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The company's products and systems are used to increase power system capacity and improve the reliability, stability and flexibility of power delivery and network control systems. It has operations in Wendell, NC; Jackson, MS; Minneapolis, MN; San Jose, CA; Schenectady, NY; Jackson, TN; Heber Springs, AR; and Atlanta, GA. For more information visit us at: www.usa.siemens.com/energy.

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Florida Power & Light Generates Growth with SAP

22 January 2008

Further demonstrating market leadership in the utilities industry, SAP AG announced that Florida Power & Light Company, one of the largest power utilities in the United States, has selected the SAP® for Utilities solution portfolio. FPL will consolidate numerous disparate systems to better manage corporate planning, asset management and compliance reporting, and provide a standard platform to support the company's growth strategy. Expanding on its existing SAP footprint in financials, supply chain and human resources, FPL will standardize on the SAP NetWeaver® technology platform to more quickly and easily integrate new systems as its business continues to expand. The announcement was made at the DistribuTECH 2008 Conference and Exhibition, being held in Tampa, Florida, January 22-24.

"SAP's solution set for utilities, combined with the company's overall industry expertise, provides the tools we need in order to best position our companies for success," said Dennis Klinger, CIO, Florida Power & Light. "Managing assets, reaching customers and enabling corporate executives to make sound decisions for growth are all mission-critical priorities for today's utilities. Our focus is to provide better visibility and access to data and the ability to analyze it so that we can optimize our assets, identify opportunities that make sense and create products and services that our customers demand."

FPL will implement the SAP for Utilities set of solutions to address industry challenges of compliance, performance management and planning. The portfolio will provide better visibility into asset operations, including the operation of the nation's largest wind farm. To facilitate a smooth and rapid transition to SAP solutions for end users, FPL will leverage Duet™ software from SAP and Microsoft to provide users with access to applications from a familiar Microsoft Office interface.

"Today's utilities are faced with many challenges and opportunities, from creating energy through wind farms to identifying ways to reduce consumption and environmental impact," said Maureen Coveney, industry principal, Utilities, SAP Americas. "Efficient and robust IT solutions are required to help utilities in efforts to please investors, customers and regulators alike. We are proud of SAP's distinguished reputation and leadership in providing the tools best designed for the needs of our more than 1,150 utility customers worldwide."

Additional information at <http://www.sap.com/industries/utilities/>

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Guntert & Zimmerman Construction Division Chooses Adept Document Management to Improve Engineering Collaboration

23 January 2008

Synergis Software announced that Guntert & Zimmerman Construction Division, Inc. (G&Z) (<http://www.guntert.com>) is using Adept document management software to increase productivity and

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facilitate collaborative engineering. G&Z chose Adept for its outstanding ability to manage, control and share both very large SolidWorks® files and 2D AutoCAD® design files. Synergis Software's 18 years experience in supporting document management also factored heavily into G&Z's selection of Adept.

"The company's technical expertise, U.S.- based sales and support, single focus on document management, and flexible implementation plan narrowed our choice to [Synergis Software](#)," said Jerry Dahlinger, vice president of Engineering, Guntert & Zimmerman Construction Division, Inc.

Collaborating in a Mixed CAD Environment

"We required a document management solution that could handle both AutoCAD and SolidWorks information," said Dahlinger. "We have used AutoCAD for years and continue to use it to maintain drawings of older products. If we do a major modification in SolidWorks, then we have a hybrid product—a combination of SolidWorks and AutoCAD drawings. Adept allows us to search for a part and see the relationships between a SolidWorks assembly and its AutoCAD components. That way we can use our legacy information and still use new 3D tools."

"We couldn't go on using SolidWorks without a data management system that supported its interdependent file structure," said Dahlinger. "We had lots of problems when we had several SolidWorks users working on the same design project, with different overlapping areas of the machine. Our productivity was very low and it finally became a crisis." G&Z also uses Adept in manufacturing and sales to guarantee the latest revision of a part is made and ordered. There are 25 people in the Engineering Department, the Shop Floor and Sales using 11 concurrent Adept desktop client licenses and six Adept Explorer™ webbased client licenses.

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Mentor Graphics Catapult C Synthesis Adopted for Fujitsu Standard ASIC Design Kit, Establishes Electronic System Level Reference Flow for Customers

22 January 2008

[Mentor Graphics Corporation](#) announced that Fujitsu Limited has adopted the Catapult® C Synthesis tool to its standard ASIC (application specific integrated circuit) design kit. A number of electronic system level (ESL) synthesis tools were assessed in order to meet Fujitsu's stringent requirements for quality standards. As a result, the Catapult C Synthesis tool was selected after exhaustive tests, and deployed for current design projects, which include two tapeouts in the last few months.

"We have found that the RTL code generated by Catapult C Synthesis meets Fujitsu's stringent criteria and is applicable for our ASIC design data. We believe that being able to smoothly apply this high-level synthesis design flow to ASIC development brings a huge benefit to those customers who need to design SoCs containing complex signal processing or image processing algorithm in a short period of time," said Mr. Hasegawa, Director, ESL and Verification Department, SoC Design Engineering Division, Electronic Devices Business Unit, Fujitsu Ltd. "By including the Catapult C Synthesis library to our standard ASIC design kit, we will be able to provide our mutual customers with our ASIC development service more efficiently and with lower risk."

"By using Catapult C Synthesis and the ASIC library from Fujitsu, we successfully taped out a SoC for our next-generation multifunction devices," said Mr. Katsuhiko Yanagisawa, Engine Controller Development, Office Printing Systems Business Group, Fuji Xerox Co., Ltd. "Thanks to collaborative support from Fujitsu and Mentor Graphics, we were able to meet the deadline to develop the SoC with complex image processing algorithm. We would like to continue to use this advanced design flow for

developing our ASICs."

By providing the Fujitsu standard ASIC design kit to customers, Mentor Graphics and Fujitsu were able to perform extensive testing to ensure the quality and reliability of the Catapult libraries with Fujitsu's ASIC technology. As a result, Fujitsu's customers can expect increased efficiency and decreased risk when they use the Catapult C Synthesis tool to implement hardware in Fujitsu's ASIC technology.

"We recognize Fujitsu for having a large share in the custom ASIC market based on its advanced image processing technology, and our collaboration reinforces the importance of ESL design adoption for today's electronic systems," stated Simon Bloch, general manager of Mentor Graphics Design Creation and Synthesis division. "Fujitsu is proving that shifts from RTL methodologies to ESL methodologies built around ANSI C++ synthesis will result in successful and profitable business outcomes."

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Moldflow Plastics Insight - Enterprise Edition Software Gains Wide Adoption at Leading Companies

23 January 2008

Moldflow Corporation announced that more than 30 companies licensed Moldflow Plastics Insight – Enterprise Edition™ (MPI-e™) during its recent fiscal quarter ended December 31, 2007. This brings the total number of companies that have licensed MPI-e in just its first year of availability to 100. Existing Moldflow customers such as Robert Bosch Corporation, TRW Automotive Electronics & Components GmbH & Co., Valeo Iluminacion S.A. and LG Electronics extended their deployment of Moldflow simulation by recently investing in Moldflow Plastics Insight – Enterprise Edition, allowing each to further optimize their plastics injection molding design-to-manufacturing process.

Moldflow Plastics Insight - Enterprise Edition is a specially packaged version of the MPI software that provides broad access to the wide-ranging functionality included in the MPI suite of products. MPI-e allows companies to extend the benefits of simulation across their enterprise because it meets the 5 key criteria of Enterprise-Enabled Simulation solutions – it's accessible, configurable, process-integrated, communication-focused and can be strategically implemented.

Brian Belknap, Principal Staff Tooling Engineer at Motorola, Inc. remarked, "MPI-e has given all of our design centers the flexibility to access the complete suite of Moldflow analysis tools. The MPI-e Dashboard allows our internal Moldflow community to view which licenses are available and easily access the task level which is needed."

"We developed MPI-e in direct response to customers looking for a framework aimed at giving greater accessibility to our products more broadly across their enterprises," commented Ken Welch, Chief Operating Officer for Moldflow. "We continue to see growing recognition throughout the markets we serve that broader adoption of simulation is providing greater benefits to our customers and we are pleased to be able to provide a product such as MPI-e that can contribute to achieving those benefits."

Availability

Moldflow Plastics Insight – Enterprise Edition is available now. For more information, please call Moldflow in the US at +1-508.358.5848 or visit <http://www.moldflow.com>.

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MSC.Software Delivers Engineering Speed to Triple Eight Race's Championship Race Cars

21 January 2008

[MSC.Software](#) announced that MSC.Software's engineering simulation software, MD Nastran, was used by Triple Eight Race Engineering Australia in designing top championship race cars for the V8 Supercar Championship.

Triple Eight Race Engineering, the engineering genius behind the 888 BF Falcon, used MD Nastran to run complex simulations for dynamics and aeroelasticity for the redesign and fine-tuning of race vehicles under different scenarios. Extreme requirements in terms of racing performance and race regulations constantly drive Triple Eight to push the limits of its engineering capabilities using simulation tools like MD Nastran to leverage their engineers' expertise in developing winning race vehicles.

"Just like on the race track, speed is essential in race car design. Any refinements achieved in the design engineering process will lead to better performance on the track," said Simon Holt, Chief Designer, Triple Eight Race Engineering Australia. "MD Nastran has provided the necessary engineering simulation platform for us to improve car efficiency while reducing both the cost of materials and machine errors."

"Being successful on the track requires a combination of highly skilled, innovative engineers, strong teamwork and the use of state-of-the-art technologies. Triple Eight's innovative use of MD Nastran has produced a winning car in all aspects," said Neil Robinson, Country Manager for MSC.Software Australia. "The racing world counts in seconds and every small advantage implemented through engineering design can translate into huge margins of victory. Using MD Nastran, Triple Eight is today one of the elite names in racing."

About Triple Eight Race Engineering

Since its inception a decade ago, Triple Eight Race Engineering (Triple Eight) has grown to become one of the largest and most successful touring car operations in the world, with cars and drivers successfully running at the front of the field in the British Touring Car Championship and Australia's premier motorsport category V8 Supercars. The team won the British Touring Car Championship in 2001, 2002, 2003 and 2004 and on top of this, Triple Eight claimed the prestigious 'triple triple' by winning the Manufacturer's, Team's and Driver's Championships for three consecutive years. Recognising the sheer competitiveness of the V8 Supercar Series, with a tenth of a second marking the difference between victory and defeat, Triple Eight set about securing some of the most talented professionals from Australia and overseas. Today more than 45 race technologists, engineers, suspension technicians, commercial managers and administration assistants work from the organisation's purpose built Australian facility located in Bowen Hills on the fringe of inner Brisbane, Australia.

About V8 Supercar Championship

The V8 Supercar Championship is a touring car racing category and it is the most popular motorsport in Australia, with a steadily growing worldwide audience. V8 Supercar Championships are held in all states of Australia, as well as rounds in New Zealand and Bahrain. V8 Supercars have drawn crowds of over 250,000 spectators. The 2007 Season was held over 14 race weekends, held on various purpose-built racetracks and street circuits in the aforementioned countries. Race formats range from sprint races, where three 150 km races are held over a weekend, or endurance races such as Bathurst, which is run over a 1000 km race distance, and Sandown, run over 500km.

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NASA Ames Research Center Reduces Costs and Saves Engineering Time with Adept Document Management

22 January 2008

NASA Ames Research Center's Unitary Plan Wind Tunnels (UPWT) in Mountain View, California, leader in aeronautics and aerospace wind tunnel testing for NASA, industry, the DOD, and other government agencies, has deployed [Synergis Software's](#) Adept document management to improve efficiency and management of their design and engineering documents. With Adept, the Wind Tunnel Division saves money, reduces the time to find drawings, and gives engineers immediate access to data throughout the Unitary Plan Wind Tunnel facility.

According to Bill Newby, a Configuration Management (CM)/CAD specialist for JACOBS Technology who supports NASA's Unitary Plan Wind Tunnels, "As part of engineering support, one of my main CM functions is to maintain the engineering drawings and documents for equipment and structures that are part of the wind tunnels, including model support stings and adapters, motor fan blades and shrouds. We test scaled-down models of jet fighters like the F18; and research spacecraft like the Space Shuttle." The Wind Tunnel Division uses SolidWorks®, AutoCAD®, CosmosWorks Professional® and Surfcam® for its engineering, design/drafting, and machining needs, and Adept to manage its 12,000-plus drawings.

Prior to implementing Adept document management, the drawings for the Unitary Plan Wind Tunnel were managed at a separate facility. To find a drawing, an engineer or document control person would have to walk to that building and dig through masses of stick files or microfiche cards, taking hours or even days to locate the right drawing.

"Our main business objectives in implementing a data management system were time, cost and accessibility," says Newby. "Now we can search for documents, and pull them up in seconds. With Adept, we have the drawings available from our desktop. We type in a word and boom—the drawing or drawings we're looking for come right up."

Other advantages that Adept offered were a user-friendly interface, tight integration with both AutoCAD and SolidWorks, and an affordable price.

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Powerful Observatory Camera Model Wins SolidWorks Design Contest 2008

23 January 2008

How did our universe form? Which stars have Earth-like planets in orbit? How do galaxies develop? These are some of the eternal questions that the One Degree Imager, designed in SolidWorks® 3D CAD software, will address when it's christened in 2009. Essentially a powerful camera that will go inside a powerful telescope, the design captured the grand prize in the SolidWorks Design Contest 2007 competition. The results were announced this morning at the SolidWorks World 2008 International User Conference & Exposition.

"The One Degree Imager will deliver an image 100 times larger than the Hubble with comparable clarity," explained Senior Mechanical Engineer Gary Muller, accepting the award on behalf of the

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WIYN Observatory Tucson, Ariz. “It will capture everything the telescope looks at – a terabyte of data every night – compensating for atmospheric distortion in real time. A lot of brainpower went into this, and SolidWorks helped capture it, delivering a truly better product.”

The WIYN Observatory is owned and operated by the WIYN Consortium (University of Wisconsin, Indiana University, Yale University, and the National Optical Astronomy Observatory).

“It’s a challenge to design one of the world’s most powerful and sophisticated instruments while staying on time and within budget,” Muller continued. “SolidWorks software’s reliability, ease of use, visualization, and assembly capabilities – together with its integration with COSMOSWorks® design validation software – helped us meet those goals and execute our ambitious plans.”

Muller took home a Lenovo ThinkPad notebook computer, part of a purse worth \$75,000 distributed among the winners, who include:

Model Contest

1st place – Naber Plastics B.V., Buron Elementz Kitcar, Rob Wolkers, Engineer

2nd place – Page Product Design, Inc., Mule Industrial Lift, Matthew Page, President

3rd place – Feature Factory, Acoustic Ceiling Feature, Jonathan McGregor, Engineer

Photorealistic Images Contest

1st place – Indian Institute of Technology, Dehli, Steam Iron and Alloy Wheels, Ambar Bandi, Industrial Designer

2nd place – Gould Studios, Reproduction of the Dorpat Telescope, Bill Gould, Owner

3rd place – ThermoSpas, Inc., Swim/Trainer, James Parys, Design Engineer

Animations Contest

1st place – Paper Converting Machinery Corporation, Prolog LT Log Saw, Dan Allen, Designer

2nd place – SchuF Group, Delayed Coking Process Animation, Rory Stanley, Head of Marketing

3rd place - Wakefield High School, Out-of-the-Box Rubik’s Cube Solution, Ellis P. Kieffer, Student

“Contestants entered some astonishing designs this year, all deserving of acclaim,” said Rainer Gawlick, SolidWorks vice president of worldwide marketing. “It’s quite apparent that as our software improves, so does the ability of designers and engineers to harness their creativity and realize their engineering visions. It’s an honor these great designers and engineers have chosen SolidWorks.”

To view the winning designs, as well as the other entries, visit

[http://www.solidworks.com/pages/successes/CustomerDesignContest/](http://www.solidworks.com/pages/successes/CustomerDesignContest/CustomerDesignContest2007Entries.html)

[CustomerDesignContest2007Entries.html](http://www.solidworks.com/pages/successes/CustomerDesignContest/CustomerDesignContest2007Entries.html). (Due to the length of this URL, it may be necessary to copy and paste it into your Internet browser's URL address field. You may also need to remove an extra space in the URL if one exists.)

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Synopsys IC Compiler Successfully Employed by Matsushita for First 45-nm SoC Design Tapeout

21 January 2008

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[Synopsys, Inc.](#) announced that IC Compiler was used in a 45-nanometer (nm) system-on-chip (SoC) device of which Matsushita Electric Industrial Co., Ltd., the consumer electronics company behind the globally recognized Panasonic brand, has completed the tapeout, and which is entering volume production. In addition to IC Compiler, Synopsys' comprehensive place-and-route solution, Matsushita used Synopsys' Design Compiler® solution for high-quality RTL synthesis, and the PrimeTime® SI timing analysis solution and Star-RCXT™ extraction tool for silicon-accurate sign-off. Using the latest technologies in Synopsys' Galaxy™ Design Platform, Matsushita was successful in meeting their goals for smaller die size and lower power consumption required for its advanced consumer electronics SoC design.

"Design productivity and power consumption are important problems in SoCs for consumer applications," said Hakuhei Kawakami, director at Corporate System LSI Division, Semiconductor Company, Matsushita Electric Industrial Co., Ltd. "We expect Synopsys to deliver advanced technology for the nanometer process. Synopsys synthesis, sign-off and place-and-route solutions have been deployed in Matsushita's 45-nm design."

Consisting of more than 250 million transistors, this 45-nm device integrates three to four times more logic than its predecessor. Matsushita turned to IC Compiler for its XPS (extended physical synthesis) technology, which accelerates timing closure by extending physical synthesis to full place-and-route. In addition, IC Compiler provided tight correlation to sign-off using PrimeTime SI for timing analysis and Star-RCXT for extraction. Based on this silicon success, Matsushita is actively deploying IC Compiler on a broad range of designs. Matsushita has also moved to the latest technology in RTL synthesis by making Design Compiler topographical technology a standard part of their flow.

"Over the years, Synopsys has invested heavily in research and development at each new technology node from 90 nanometers to 65 nanometers and beyond," said Antun Domic, senior vice president and general manager of Synopsys' Implementation Group. "It's exciting to be associated with the industry's first publicly announced 45-nanometer consumer design. We congratulate Matsushita on their success, and we plan to continue working closely with them for the mutual benefit of both companies by extending the advanced design capabilities of the Galaxy Design Platform."

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Toshiba Collaborates With Cadence to Improve Analog and Mixed-Signal Design Reliability at 65NM And Below

22 January 2008

Cadence Design Systems, Inc. announced that Toshiba Corporation has deployed Cadence® Virtuoso® simulation technology to provide its analog and mixed-signal chip designers an easy-to-use and accurate reliability analysis flow. Toshiba chose the Virtuoso UltraSim Full-Chip Simulator for quantitative simulation methodology for reliability analysis at 65 nanometers and below to help ensure high performance and improve yield and quality of devices. Toshiba and Cadence worked together to implement Toshiba's advanced reliability models into Virtuoso UltraSim simulator using the UltraSim Reliability Interface and tested the results, resulting in the selection of the UltraSim simulator.

"With the Cadence Virtuoso UltraSim, Toshiba can provide highly reliable ICs for our customers, who provide consumer electronics applications, telecom-related products and peripheral devices," said Masazumi Shiochi, group manager of Mixed Signal CMOS Design Group, Toshiba's Semiconductor Company. "This reliability analysis flow enables us to meet our stringent reliability metrics, estimate the

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costs of test and debug, and meet our market window by providing high-quality devices to our end customers."

A part of Virtuoso Multi-Mode Simulation, the Virtuoso UltraSim Full-Chip Simulator is the Cadence FastSPICE circuit simulator that provides performance, capacity, and accuracy when verifying large custom, analog mixed-signal, RF, memory, and SoC designs. It uses true hierarchical simulation with patented isomorphic, adaptive partitioning algorithms and accurate RC reductions technology to provide the capacity, accuracy, and performance required for full-chip transistor level verification, regardless of design type or stage in the design cycle.

"We worked closely with Toshiba to ensure their engineers had the reliability analysis technology they need to provide visibility into the quality of their most complex designs," said Sandeep Mehndiratta, product marketing director at [Cadence](#). "The UltraSim Reliability Interface allows customers to plug in their proprietary model while securing their IP. Toshiba was able to quickly implement the Virtuoso UltraSim reliability analysis in their flow, due to its ease of use and its ability to quantify the effect of performance and yield degradation for the lifecycle of their products".

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Trompeter Enterprises Validates Workcells with Dassault Systèmes' DELMIA

14 January 2008

Dassault Systèmes ([DS](#)) announced that Trompeter Enterprises (Sterling Heights, Michigan), a specialist in automated robotic simulation and an Automation Welding Alliance company, has selected the DELMIA robotic simulation tool for validation of sophisticated automation systems.

"We work with a significant number of Tier One suppliers who are designing and installing automated assembly systems for the automotive OEMs," said Matt Trompeter, president, Trompeter Enterprises. "Without simulations to validate and improve the system designs up front, prior to production, it would take months to install a new system and our customers could never meet their delivery schedule. By verifying everything in a virtual world, we can get equipment up and running in time frames that don't adversely impact production."

The DELMIA robotic solution provides simulation for modeling and off-line programming of complex multi-device robotic workcells. The spot welding capability offers specialized tools that support both traditional and fixed TCP spot welding applications. Included with the spot welding option is a fully functional tooling interface for the construction and simulation of complex tooling and fixture device clamps. Collision-free robot trajectories can be automatically determined, and numerous optimization features can be used to reduce process cycle times. The solution helps to reduce cost, design and manufacturing time, and accelerate time-to-market.

Trompeter Enterprises is using the tool on a current project to validate a newly automated welding and assembly workcell. Where there were previously eight operators, the new system is designed to include ten robots and two operators. With the DELMIA solution, Trompeter has been able to identify potential tooling collisions or robotic arm reach issues, driving changes that improve the system design while still in a virtual mode. Additionally, once the virtual simulation is complete, Trompeter can reference the data for future analysis and create "what if" scenarios at minimal cost and with no downtime.

[Trompeter Enterprises](#) is part of the Automation Welding Alliance (AWA), a consortium of five companies formed to be a "one-stop" resource for automation system programming/debugging, welding,

panel build, simulations, design and training for pressroom or welding and assembly manufacturing. The AWA is holding an open house at 44440 Phoenix Drive, Sterling Heights, Mich., on January 23, 2008 from 9:00 am until 7:00 pm to demonstrate its capability to existing and prospective customers.

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Vandenberg Air Force Base Enhances Space Launch Imagery With Autodesk Visual Effects and Editing Solutions

7 January 2008

Autodesk, Inc. announced that Vandenberg Air Force Base, California, is using the Autodesk Smoke editing/finishing system and Autodesk Flame visual effects system to produce high-definition space launch videos. This suite of products has helped Vandenberg AFB seamlessly transition to HD video and has reduced video production time by 50 percent, with video and visual products ready for viewing in less than an hour.

The Autodesk Smoke and Flame Suite enables visual information specialists at Vandenberg AFB to collect and manipulate the data from their 300 field and high speed cameras, capturing 130 frames per second, without decreasing the image resolution. Users are able to acquire data, and depending on the requirements, stabilize blurriness, remove elements to de-classify images and infuse spectra of light to compile and store mission pictures, allowing a seamless workflow. The solution also supports live feeds of streaming video from new initiative and program testing.

"As the only National Transportation Safety Board launch facility on the West Coast, Vandenberg is responsible for managing Department of Defense space and missile testing, and placing satellites into polar orbits," said Bill Goodson, vice president, Autodesk Government. "It was essential during their transition to high-definition digital data that they continue to quickly produce high-quality videos for a wide range of audiences from scientists to the President of the United States. The functionality of Autodesk's Smoke and Flame Suite ensured they were able to easily support their mission in a timely, cost-effective and secure manner."

"While Vandenberg Air Force Base's unique requirements may seem different from Autodesk's traditional editing and visual effects users, such as film studios, the need for a multi-functional editing and visual effects system that can aid in the production of high-quality, high-definition imagery products is standard across the board," said Juliana Slye, director, Autodesk Government. "Autodesk's Smoke and Flame Suite can help users easily capture, edit and share vast amounts of data, while delivering superior content with speed and visual impact."

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Product News

Agilent Technologies' Large-Scale RFIC Design Software is First to Perform Multiple Simulations from Single License

24 January 2008

Agilent Technologies Inc. announced the industry's first capability for multiple, parallel circuit simulations (Quad-Pack) from a single license in its GoldenGate RFIC simulation, analysis and verification software suite. The company also announced enhancements to the software's Design-for-

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Yield (DFY) capabilities. The new features help boost large-scale RFIC productivity and speed wireless communications products to market.

"Large-scale RFIC design and simulation is one of the most demanding activities designers face," said John Barr, product marketing manager with Agilent's EEs of EDA division. "Designers simply run out of time to do serial simulations and DFY experiments. This latest GoldenGate release removes many of the time constraints associated with simulation, eliminating designer downtime and resulting in faster and better fabrication yields."

The Agilent GoldenGate Quad-Pack feature is part of the 4.1.8 release of the GoldenGate software package. It is the only tool of its kind available today that allows multiple simulations from a single software license. In the past, designers faced downtime in their design cycle while running simulations, because a single simulation tied up the license and didn't allow for any parallel work. With GoldenGate's Quad-Pack, designers can verify designs across process, voltage and temperature variations via an efficient, parallel Monte Carlo capability that allows up to four simultaneous simulations, freeing up the design portion of the license for other design work. It does this by taking full advantage of today's modern multi-core computer processing technologies commonly available in design-team computer networks.

Agilent's GoldenGate software is an advanced RFIC simulation and analysis solution for integrated RFIC design. Its unique simulation algorithms are optimized for the challenging demands of today's complex RFIC design, enabling full characterization of complete transceivers prior to tape out. To ensure device manufacturability and reduce design spins, GoldenGate takes advantage of frequency-domain capabilities to perform necessary analyses such as statistical yield simulations at speeds up to orders of magnitude faster than traditional transient-based techniques.

This latest GoldenGate release also includes these productivity enhancing features:

support for the Cadence ADE Corners Tools (IC 5.1), allowing designers to run multiple corner simulations in parallel with the Quad-Pack feature;

*a new boundary mode Monte Carlo with the orthogonal array option for better coverage with fewer trials; and,

*a new display for monitoring the simulation progress in parallel and viewing trial results even while the simulation is running.

GoldenGate SuperLicenses are available for additional parallel-simulation capabilities for designers with access to large compute farms. These SuperLicenses can provide 10 or 20 additional parallel simulator licenses.

For more information about GoldenGate Quad-Pack and DFY capabilities, visit www.agilent.com/find/eesof-goldengate.

To request a demo of GoldenGate, visit www.agilent.com/find/eesof-goldengate-demo-pr.

U.S. Pricing and Availability

Agilent's GoldenGate is available now, with prices starting at approximately \$42,000.

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Apriso Accelerates New Product Introductions for Consumer Goods Industry

January 2008

Based on growing success in providing consumer goods manufacturers with an adaptive, globally synchronized manufacturing operations management solution, Apriso Corporation announced extended availability of FlexNet® for Consumer Goods. This industry-specific solution provides an adaptive operations execution system with real-time global visibility and control to synchronize and accelerate new product introductions while simultaneously preserving brand integrity.

Recently designated as a reader's choice selection, Apriso FlexNet has been successfully deployed at several industry-leading consumer goods manufacturers, including L'Oréal (health & beauty), Amcor (packaging), Amica Wronki (durable goods), BAT (tobacco) and a number of other consumer goods companies.

Consumer goods manufacturers are challenged to bring new products to global market faster while insuring the highest product quality. The complexity of this challenge is magnified due to several conflicting forces, including an explosion of the global consumer marketplace, increased product complexity and shorter development, production and refresh cycles. The biggest risk, however, is the loss of brand reputation, as evidenced by recent product recalls and supplier snafus. Regardless of where fault lies, the resulting impact is damage to the consumer goods manufacturer's reputation.

Apriso FlexNet for Consumer Goods is a Manufacturing Operations Management (MOM) solution that simultaneously addresses these industry challenges by:

- Globally synchronizing operations processes within production, inventory and supply chains into one system with real-time visibility and control across plants and geographies
- Integrating to enterprise applications, including Product Lifecycle Management (PLM) and Enterprise Resource Planning (ERP), creating closed loop processes for continuous improvement between new product development and engineering, corporate planning and the shop floor
- Improving product quality by managing production processes and providing real-time visibility if quality metrics are not attained, effectively shortening the time to global market without sacrificing brand equity

“The growing market acceptance of Apriso FlexNet by consumer goods manufacturers is attributed to the dramatic return on investment we have delivered to our customers,” iterated Jim Henderson, president and CEO of Apriso. “When our customers complete an effective new product introduction across 18 markets worldwide without any resulting quality issues, it is pretty clear the value we have provided.”

One Apriso customer now reaping these benefits is a worldwide leader in cosmetics, hair care, skincare, makeup and fragrances. Implementing Apriso FlexNet across 20+ locations within both discrete and batch operations, this customer has improved efficiency, visibility and control over operations. An immediate benefit has been better synchronization across globally distributed operations, enabling smoother integration between product development and new product introductions within each of their market geographies.

One area where accurate reporting of manufacturing performance is acutely needed is within the execution of Quality Control processes. Several high profile quality issues surfaced last year, resulting in unplanned delays, bad publicity and lost sales for several consumer goods providers, thereby hurting the value of their brands. Better managing production to eliminate quality issues, as well as providing real-

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time visibility as quality issues occur, helps avoid delays in bringing new products to market.

Apriso FlexNet provides a closed loop system between evolving product, supplier and engineering specifications, as well as complete integration between ERP and Product Lifecycle Management (PLM) applications. In this way, information is continually updated between plant and corporate systems, enabling logistical and product design modifications to be easily managed. And, as the FlexNet platform leverages a unified data model, traditional issues surrounding master data management, such as which application should retain ‘original’ records or how ERP data will be updated, are easily addressed. The result is higher product quality, improved agility and a less likely chance of missing a product launch timeframe.

To learn more about how consumer goods manufacturers are using Apriso FlexNet to synchronize operations for reduced time to global market, please go to: <http://www.apriso.com/news/events.htm>.

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Arena Solutions Announces Expanded Support for SolidWorks’ PDM Product Line with its Development of a New Integration Between Arena PLM and SolidWorks’ PDMWorks Enterprise

21 January 2008

[Arena Solutions](#) announced expanded support for SolidWorks Corporation’s product data management (PDM) software with its intention to build a new integration between Arena PLM and PDMWorks Enterprise corresponding with the release of SolidWorks 2009. Similar to the integration that already exists (since 2004) between PDMWorks Workgroup and Arena PLM, the new PDMWorks Enterprise integration will improve the transfer of mechanical design data managed in PDMWorks Enterprise software to on-demand Arena PLM, a single central repository that enables companies to define, control, and securely share product information throughout their extended enterprise.

“For our data management customers who seek a PLM solution, Arena Solutions provides a capable, cost-effective solution that is quick to deploy and easy to learn,” said Efrat Ravid, director of marketing alliances, SolidWorks, Corp. “We are pleased Arena has chosen to develop a new integration for PDMWorks Enterprise so our customers with more complex requirements and the need for PLM can leverage Arena PLM.”

The new Arena PLM PDMWorks Enterprise integration will control and automate the flow of mechanical computer-aided design (CAD) files and specifications to Arena PLM, where mechanical designs are combined with product information from other disciplines such as electronics sub-systems, sourcing, and manufacturing, to create the complete definition of the product.

In addition to the new integration, improvements will also be made to the existing PDMWorks Workgroup integration, helping to further streamline the transfer of design data into Arena PLM for Workgroup users.

More than 70 percent of Arena PLM users have already realized the benefits of using Arena PLM and SolidWorks software together. They find Arena’s on-demand delivery gives them access to the benefits of PLM without requiring them to pay the extensive costs associated with traditional client server systems. Those still using manual processes or facing obstacles related to unsuccessful attempts to manage data from PDM to production, can take the next critical step of automating their design-through-manufacturing process—from CAD to PDM to PLM—with Arena PLM. The combination of Arena PLM and SolidWorks software enables users to be more competitive, productive, and successful.

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“Manufacturers who aren’t already taking advantage of the benefits of taking their well-defined design and engineering environment and connecting it to their extended product and operations teams with Arena PLM should certainly consider it,” said Craig Livingston, chief executive officer, Arena Solutions. “Arena PLM can effectively extend the value of users’ investment in SolidWorks PDM software. Used together, the software can certainly help companies bring superior products to market more quickly and at a lower cost.”

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AVEVA Announces the Release of AVEVA VPRM 9.6 SP3

23 January 2008

AVEVA announced the release of AVEVA VPRM 9.6 SP3. AVEVA VPRM is a totally integrated solution that enables the effective management of resources throughout all phases of a project from inception to client handover. AVEVA VPRM comprises a resource management suite that helps manage risk, reduces costs and provides project control throughout the life of a project.

There are several product enhancements in Service Pack 3 for Release 9.6.

These include:

- *More effective monitoring & control over the lifecycle events for project tagged items, whether based on their inclusion as part of a tag list (especially major equipment), or based on their inclusion as part of material requirements (e.g. piping spools);

- *A flexible method to restrict access to purchase orders (pricing information) based on project "purchasing groups"; allowing multi-office purchasing departments to maintain key procurement data independently; and, for posterity, extended to facilitate review of project historical detail in the vendor database (VDB);

- *A configurable process that enables construction to improve fabrication scheduling of individual piping spools by providing the isometric spool breakdown, based on a 3D-modeller (particularly AVEVA PDMS), and thereby allowing construction to revise / re-plan spool fabrication as material availability dictates;

- *Support for Microsoft Office 2003 SP3, with its necessary security enhancements; plus, further productivity enhancements throughout the materials management process.

Richard Longdon, CEO of AVEVA comments: "AVEVA VPRM has consistently helped our customers complete their projects within budget and ahead of schedule and provided the ability to significantly reduce material surpluses. This release of VPRM 9.6 SP3 demonstrates AVEVA's continual efforts to bring even more functionality and productivity gains to our new and existing customers"

[AVEVA](#) VPRM 9.6 SP3 is now commercially available.

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Consumer Product Design Process Improved with VX Real-Time Analysis

23 January 2008

VX Corporation announced new real-time curvature and draft analysis capabilities in VX CAD•CAM Version 13 for enhanced consumer product development.

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Real-time Analysis Provides Uninterrupted Product Design Sessions

Two types of analysis of utmost importance to consumer product developers are zebra stripe and draft analysis. Zebra stripe analysis is a “striping” technique that lets designers analyze curvature providing early insight into a product’s look and feel – two characteristics of extreme importance in consumer product development. Draft analysis is important for evaluating the “moldability” of a product. Not enough draft, negative draft or undercuts increases complexity, cost and time in both mold and product production – something all manufacturers desperately seek to avoid.

Real-time zebra stripe analysis shown while modeling a part with Version 13 of VX CAD•CAM

Typically designers have to go into a special analysis mode to do these types of analysis and then go back into modeling mode to make modifications. This slows down and interrupts the design process, and even worse, puts designers in a trial and error, flip/flop mode of operation that significantly degrades their overall performance. However, now with VX Version 13, users can continuously work on a model while displaying either a zebra stripe or draft analysis thus providing instantaneous, real-time feedback without interruptions or slow-downs.

VX hybrid modeling lets users model instantaneously with solid, surface or wire-frame geometry in real-time analysis mode which significantly reduces interruptions to their session or system degradation. For example, an industrial designer can simply turn on zebra striping analysis to check curvature while modeling a product and then instantly switch over to draft analysis to see if there are any draft problems.

Real-time draft analysis while modeling a part with Version 13 of VX CAD•CAM showing undercuts highlighted in green

"When we first introduced real-time analysis to our reseller partners and early Version 13 adopters, they were thrilled with this new capability and surprised that fast graphics performance was not compromised," said Bob Fischer, VX Vice President Sales and Marketing, "With this and other enhancements in Version 13, VX continues to enhance its position in the world of plastic product development and mold manufacturing."

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CoWare and STARC Integrate SystemC TLM Methodology

21 January 2008

[CoWare, Inc.](#) announced the successful collaboration with the Semiconductor Technology Academic Research Center (STARC) in Japan to support CoWare’s open SystemC modeling library (SCML) APIs for the creation of highly reusable virtual platforms for architecture design and software development within CoWare’s ESL 2.0 environment using STARC’s new transaction-level (TL) modeling guideline.

STARC TL Modeling guidelines ensure cooperation between client companies involved in SoC developments and their ESL, EDA, IP suppliers, and design houses goes smoothly. The new TL Modeling Guideline, which describes an efficient design methodology enabling Japanese semiconductor companies to reuse SoC platform models at the system level, is based on industry standards from the Open SystemC Initiative (OSCI), the IEEE 1666™-2005 Standard for SystemC, and established practical de-facto standards for transaction-level model interoperability as recommended by the System Level Design Group of STARC. This work includes participation by engineers from leading companies driving the adoption of ESL design methods in Japan, including NEC Electronics, Oki Electric Industry, Renesas Technology, Sony, and Toshiba.

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“SystemC has been widely adopted by the majority of systems and semiconductor companies in Japan for architectural optimization and verification and for early software development. At STARC, our goal is to help our member companies, and the electronics and semiconductor communities in Japan, to increase the leverage of their ESL design efforts by developing and providing TL Modeling guidelines,” said Yoshio Okamura, Vice President and General Manager, Development Department-2 STARC. “Following these guidelines will help streamline model creation and reuse for architecture design and software development, and the synthesis of RTL from SystemC.”

“As the leader in SystemC and TL modeling, it made perfect sense for STARC to use CoWare Platform Architect and IP models because they had already developed the SystemC Modeling Library (SCML) technology,” said Yahiro Shiotsuki, leader of the STARC ESL modeling project. “By using CoWare’s ESL 2.0 solutions, we were able to increase the leverage of SystemC modeling by making the models usable for cycle-accurate architectural optimization and early software development.”

“STARC’s RTL Design Style Guide is already widely used within SoC design teams in Japan. With the growing mainstream production use of ESL design methods, we believe the impact of STARC’s new TL Modeling guideline on transaction-level model interoperability and reuse will be of equal significance and value to the industry,” said Patrick Sheridan, director of marketing, CoWare. “CoWare is very pleased to support STARC in the development of the new TL Modeling guideline and help extend its benefit through the integration of openly accessible SCML APIs.”

STARC released their guideline manual to their sponsor companies in December, 2007, and will present their TL Modeling guideline results at the EDS Fair 2008 show in Yokohama, January 24-25. Designed to protect user investment in the highly-reusable SystemC TLM peripherals created for use in CoWare Platform Architect and CoWare Virtual Platform, SCML API source code kits are openly available for download at www.coware.com for use in all IEEE 1666 SystemC compatible environments.

For more information about STARC and its research, visit <http://www.starc.jp/index-e.html>.



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Dassault Systèmes Launches ENOVIA MatrixOne 10.8 - Single Collaborative PLM Platform Foundation

24 January 2008

Dassault Systèmes ([DS](#)) announced the availability of ENOVIA MatrixOne 10.8. ENOVIA MatrixOne 10.8 is a major step in DS’s ENOVIA strategy and the first V6 enabled solution in support of PLM 2.01. ENOVIA MatrixOne 10.8 is the foundation of DS’s single PLM platform for all customer business processes in all industries.

“ENOVIA MatrixOne 10.8 is the foundation for DS’s V6 platform - central to our long term vision and future PLM offerings and services,” said Joel Lemke, CEO, ENOVIA, Dassault Systèmes. “By adopting ENOVIA MatrixOne 10.8, existing and future customers will be V6 ready.” ENOVIA MatrixOne 10.8 is a significant step in DS’s SOA strategy for PLM, to manage and federate any PLM related IP in the extended enterprise.

ENOVIA MatrixOne 10.8 is a major contributor to the values of the newly announced V6:

Single PLM platform for IP management:

- Demonstrating DS’s commitment to deliver innovative industry accelerators and applications

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supporting PLM strategies in DS's target industries

- Delivering a New Collaborative Platform to federate all PLM related IP in the extended enterprise

Global collaborative innovation:

- Providing a solution to enable collaborative innovation communities for global enterprises and their supply chains
- Enabling technologies for dynamic creation of structured and ad-hoc ecosystems for innovation between enterprises

Online creation and collaboration:

- Supporting the creation of online communities that need to reuse, share, experience, collaborate and create IP

Lifelike experience

- Providing a new industry benchmark for PLM, with unrivalled realism in business process modeling and simulation
- Allowing customers to benefit from DS's award winning 3DLive navigation technology, to experience IP live online

Ready-to-use PLM business processes

- Delivering unique competitive advantages based on next-generation best practices across the PLM lifecycle, including: modeling, simulation, manufacturing, support and enhanced program management of complex multi-site, cross-functional programs
- Leveraging online dynamic modeling and execution of business process technologies,
- Expanding its accelerator portfolio significantly in industries including: life science, apparel and semiconductor

Lower cost of ownership:

- Implementing the best of the online and SOA worlds, with PLM capabilities going far beyond SOA standards (dynamic business process modeling, bi-directional federation based on XML, minimum footprint), making V6 the most powerful and open PLM platform, the quickest to deploy and lowest by far in terms of global cost of operation

All ENOVIA MatrixOne 10.8 solutions are scheduled for general availability in February 2008, available as a standard upgrade for ENOVIA MatrixOne customers.

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Dassault Systèmes Launches 3DLive for Multi-CAD PLM Environments

21 January 2008

Dassault Systèmes (DS) announced a new version of its online collaboration solution 3DLive, which has been enhanced to take advantage of multi-CAD product information. 3DLive for multi-CAD provides enterprise customers with real-time business insight and facilitates better decision making throughout the product lifecycle.

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3DLive for multi-CAD enables companies to expand their collaborative environments to encompass every stakeholder in the product development process. Leveraging 3DLive's award-winning 3D search and navigate capabilities, users can accelerate the innovation process by intuitively finding and sharing critical product information while collaborating in real time. Designed to support multi-CAD environments, this next generation of 3DLive can display and navigate product information created in CATIA, SolidWorks, Pro/E Wildfire, Siemens/UGS NX and Autodesk Inventor. This release also includes support for the latest collaboration platforms from IBM (Lotus Sametime 7.5) and Microsoft (Office Communicator Server 2007) enhancing cross platform interoperability and allowing enterprises to deploy comprehensive collaboration infrastructures.

"Many enterprises run more than one CAD system, meaning that core data is managed by multiple product data management (PDM) tools that are not always accessible to the enterprise-wide decision making process," said Stephane Declee, vice president, ENOVIA R&D, Strategy & Industry Solutions, Dassault Systèmes. "To build a collaborative PLM environment that truly fosters innovation, quality and efficiency, every product development stakeholder must be able to find, see and understand information easily and instantly. 3DLive for multi-CAD creates that open landscape, where design, engineering, production, customer service, finance and marketing departments can freely share information and ideas to help speed innovation."

3DLive for multi-CAD will be demonstrated at SolidWorks World 2008, at the ENOVIA SmarTeam booth, #719, and in the Partner Product Theater on Monday, Jan. 21, 7:00 PM.

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Dassault Systèmes Unveils PLM 2.0 on V6 Platform

24 January 2008

Dassault Systèmes (DS) announced PLM 2.0 and its new V6 platform. PLM 2.0 – PLM online for all, is a 3D online environment for everybody to experience products virtually where all user interactions generate Intellectual Property (IP). V6 is DS's next generation platform for PLM 2.0.

"PLM 2.0 is to PLM what Web 2.0 is to the Web, harnessing collective intelligence from online communities. Any user can imagine, share and experience products in the universal language of 3D. PLM 2.0 brings knowledge, from idea to product experience (IP), to life. It merges the real and virtual in an immersive lifelike experience," explains Bernard Charlès, president and CEO, Dassault Systèmes. "With V6, IP can be put to use immediately via 'networked' PLM solutions, so that anybody can 'test drive' a virtual product in the real world."

"Online collaboration and content authoring is critical for our business. Working globally around the clock is necessary in today's business climate. V6 enables people to work together concurrently in real time via a simple Web connection. The 3D interface and user experience make it easy for anybody to participate in the product lifecycle - designers, supply chain, or end customers. This improves our ability to innovate for our customers rapidly and efficiently," says Walter Knoblauch, PLM manager, Schuler.

"V6 delivers a single PLM platform for all PLM business processes, available to anybody anywhere, spanning engineering groups, business and end users. V6 also gives intelligent access to all IP no matter the data source location, with MatrixOne technology built into the foundation. V6 is an open platform, embracing SOA standards and rapid to deploy," explains Dominique Florack, senior executive vice president, Products - R&D, Dassault Systèmes.

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V6 values match customers' requirements for their PLM strategies:

- Single PLM platform for IP management: V6 supports modeling applications spanning all engineering disciplines and Collaborative Business Processes (CBP) including end user experiences, through the product lifecycle.
- Global collaborative innovation: PLM's future is about expanded collaboration amongst all players, so that they can bring together Requirements, Functional, Logical and Physical (RFLP) definitions of the product.
- Online creation and collaboration: V6 is enabled for real time, concurrent work, across multiple locations via a simple Web connection. This is critical for companies implementing global engineering and manufacturing strategies.
- Lifelike experience: V6's interface is intuitive - any user can easily find and search information, communicate, collaborate and experience products in 3D online – mimicking what would happen in the real world.
- Ready-to-use PLM business processes: V6 unifies engineering and enterprise processes including program and compliance management and sourcing. V6 Industry Accelerators provide industry-specific PLM best practices and capabilities, to speed deployment and cut time to ROI.
- Lower cost of ownership: Quick ramp up time via a single server and database for all applications dramatically reduces cost of ownership and spurs efficient collaboration. SOA standards compliance allows easy integration with existing systems and modeling of business processes with no programming skills, supporting an adaptable business model.

DS's V6 PLM solutions (CATIA, DELMIA, SIMULIA, ENOVIA) are scheduled for general availability in May 2008. As for previous major versions, DS will expand the value of customers' existing PLM assets and continue to develop V5 releases, enabling transition to V6. As part of this effort, ENOVIA MatrixOne 10.8, announced today, is V6 enabled. By upgrading to 10.8, ENOVIA MatrixOne customers will be V6 ready. For more information, visit <http://www.3ds.com/V6>

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EMC Advances Web-Based Distributed Document Capture

23 January 2008

EMC Corporation announced its newest distributed document capture solution that offers advances in Web-based distributed capture -- EMC Captiva eInput 2.0. Key to streamlining paper-based transactional processes, eInput 2.0 makes the scanning and indexing of paper documents from remote offices faster and easier -- automating the classification of documents, extraction of data, and validation of information directly from a Web browser. eInput 2.0's market-leading remote capture capabilities are key enabling technologies, helping companies realize more seamless, effective, and responsive distributed operations.

Captiva eInput works as an extension to the Captiva InputAccel platform, delivering best-in-class distributed capture with the EMC Documentum platform to address transactional content management (TCM) applications, such as loan processing, insurance claim processing, invoice processing, new account enrollment, and case management. In addition, working with InputAccel, eInput integrates with a wide array of back-end systems, including enterprise content management (ECM), business process

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management (BPM), and other enterprise applications. Together, these solutions enable organizations to easily add distributed capture capabilities to their existing business processes and information infrastructure.

"When used in conjunction with EMC's InputAccel capture solution, Captiva can effectively accelerate the capture of paper documents from remote locations and reduce or eliminate manual handling and delivery service costs between remote offices and centralized processing," said Chris Preston, Senior Director, Content Management and Archiving, EMC Corporation. "The end result delivers true competitive advantage for our customers by providing global reach for transactional-based process that is fully integrated with centralized back office processes -- substantially reducing costs, improving user productivity, and accelerating business processes."

Key to Captiva eInput 2.0's market-leading and award-winning technology is several features to make scanning of paper documents faster and easier:

- * Intuitive thin client interface can be easily deployed to remote offices, enabling scanning and indexing of documents directly at the source
- * Scanning and indexing documents at remote/branch sites eliminates the expense of mailing documents and accelerates both capture and the processing of work
- * Point-and-click setup of field level and database validation capabilities provides a way to configure integration environments and ensures information is accurately captured the first time
- * The ability to scan and index documents while offline enables document capture to occur in disconnected environments
- * Supports automated indexing technologies such as barcode and/or OCR zonal recognition, accelerating the speed and the accuracy of data capture and business processes
- * Supports automated document sorting, such as separator sheets, barcodes, and patch codes, allowing quick organization of documents without manual intervention
- * Integrates with Captiva InputAccel and Dispatcher technologies, enabling organizations to further automate the classification, extraction, and delivery of content to any enterprise content management system and/or business application

"For the past several years, Paperfree Corporation has partnered with EMC, because they have clearly set the bar for excellence in the enterprise capture marketplace. And eInput 2.0 is no exception," said James Robinson, President/CEO of Paperfree. "With EMC's distributed capture solution, we will be able to more quickly develop and deploy distributed capture solutions, while enabling our customers to gain control of complex, distributed paper-based processes. eInput will allow us to easily deliver solutions that dramatically streamline their business processes and substantially reduce the costs associated with capturing critical business documents."

EMC's Captiva document capture solutions enable companies to automatically transform business-critical information from paper, fax and electronic data sources into business-ready content suitable for processing by a wide variety of applications. EMC's Documentum and Captiva products are widely recognized as the industry's leading platform for enterprise content management and information and document capture. For more information, please visit <http://www.emc.com/products/family/captiva-family.htm>

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EVE and CoWare Forge Strategic Alliance

21 January 2008

EVE and [CoWare, Inc.](#) announced a strategic alliance to provide design teams with an integrated approach that ties hardware/software co-verification from EVE with SystemC virtual platforms developed with CoWare's ESL 2.0 solutions.

This link between two production-proven design flows, made possible through standard transaction-level interfaces, will reduce overall development time for multicore/multi-application systems on chip (SoCs). The integration will be demonstrated during the Electronic Design & Solution Fair (EDSFair) 2008 January 24-25 at the Pacifico Yokohama in Yokohama, Japan.

Linking EVE's ZeBu (for Zero Bugs) fast, state-of-the-art emulation, with CoWare Platform Architect, via the fast transactor interface supported by ZeBu, reduces time and effort needed to verify SoC designs that include a mix of SystemC and register transfer level (RTL) blocks. This is accomplished by co-executing RTL blocks in ZeBu and SystemC transaction-level platform in CoWare Platform Architect. This approach allows for early design optimization using a wider set of test scenarios before engineering samples and prototyping boards are available, and can be used ahead of a register transfer level (RTL) implementation of the complete SoC design.

Additionally, by reusing the ESL virtual platform — the SystemC platform and embedded software — from previous design tasks, the time to set-up test environments to verify subsystem intellectual property (IP) with ZeBu is reduced. This improves design quality, enables the use of exact reference golden test streams for verification, and accelerates execution and debug to increase efficiency. The product development process is streamlined because complete system verification is completed before physical implementation.

“ESL 2.0 is here today and due in large measure to the growing use of CoWare's virtual platforms and its continued innovation,” remarks Dr. Luc Burgun, EVE's chief executive officer (CEO) and president. “EVE welcomes the opportunity to forge a strong strategic alliance with such a visionary company, a direct result of customer requests to link emulation with ESL methodologies.”

“The emergence of new multi-core design challenges requires design teams to apply a combination of ESL and emulation technologies to a large community of users,” says Alan Naumann, CoWare's president and CEO. “The CoWare/EVE alliance brings together the leading providers of ESL and emulation technologies that are deployed in production today, enabling architects, hardware designers, system integration and test teams to develop a better product faster. CoWare is pleased to partner with EVE to deliver this valuable combination to our mutual customers.”

Through the alliance, EVE and CoWare will work together to introduce complementary transactor strategies and roadmaps based on the emerging Open SystemC Initiative (OSCI) Transaction Level Modeling (TLM2) standard for model interoperability. Because this integration is IP vendor independent, it offers more flexible support for design-chain requirements of mutual customers.

Website: <http://www.eve-team.com>.

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First Trace Delivers Service Pack 2 for Kinnosa Enterprise Document Management

23 January 2008

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First Trace, Inc. announced the release of Service Pack 2 (SP2) for Enterprise Document Management, powered by Kinnosa. This release contains numerous system enhancements and fixes for expanded solution performance. SP2 includes seamless integration and support for AutoCAD 2008 and SolidWorks 2008, providing comprehensive document management and process management capabilities with these complex CAD tools. Advanced Windows Extension Service permits Enterprise Document Management features and functionality to incorporate into users Windows Desktop and Microsoft Office programs as well as OpenOffice. File search functionality has also been enriched to improve the user experience.

The SP2 release is the result of months of software testing and refinements by First Trace developers to make user-identified product improvements and add many new features to Enterprise Document Management, powered by Kinnosa. This SP2 release further advances First Trace's goal of providing visibility of all customers' business documents and data from the very first trace to the final use and retirement. Kinnosa customers can easily install this new service pack to upgrade from previous software versions.

"First Trace's mission is to innovate open solutions built on industry standards that are easy to use, upgrade and deploy enterprise-wide for our global customer base," says Terry Simpson, CEO of First Trace. "The SP2 release is a direct response to our customers' expressed needs for an affordable, integrable, and easy to implement content management solution that will work with their Microsoft Office and OpenOffice programs and critical CAD applications."

Service Pack 2 Includes Upgrades to Maximize Operational Efficiency

Enterprise Document Management, powered by Kinnosa, is a traceable, transparent, and distributed application built upon open standards, with an open data repository. Kinnosa organizes data into a "virtual repository" rather than a centralized data vault, allowing users to manage and search information scattered across a distributed environment as if it was stored locally. The updates and enhancements included in SP2 focus on four core components designed to increase customer's design efficiency, return-on-investment and ultimate satisfaction:

Support for AutoCAD 2008 and SolidWorks 2008

Enterprise Document Management, powered by Kinnosa, was developed to provide critical document management capabilities to engineers utilizing complex CAD tools like AutoCAD and SolidWorks. With the release of SP2, Enterprise Document Management features and functionality can integrate with the most current versions of these widely used CAD applications so that essential document management operations can be performed directly in the AutoCAD 2008 and SolidWorks 2008 applications. This level of integration permits the designer to work in a familiar CAD environment and minimizes training requirements.

Windows Extension Service

SP2 includes Windows Extension Service allowing Enterprise Document Management to connect to and operate on the Windows desktop. Advanced document management features provided by Kinnosa can be utilized from Windows Explorer for ease-of-use by even the most novice employees. Employees outside of the engineering department can now take advantage of automated document management using familiar desktop tools without extensive training.

Improved File Search Capabilities and Performance

File searches must be extremely efficient with evolved document management solutions to meet the

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needs of both technical and novice users. So SP2 includes improvements to optimize the search capabilities with Enterprise Document Management. Users can now easily execute simple and very advanced wild card searches across distributed workspaces for a rapid response. Search result windows can display additional document properties such as version number, author, document status, related parts, modification history and any other pre-defined or custom properties the user selects to make identification quick and easy.

Document Loading Utility Added

Moving files from one repository, directory, or folder to another can be an extremely time consuming and labor intensive process during new product roll outs. A document loading utility has been included in SP2 to allow Kinnosa to smoothly transition large volumes of data from existing systems, like eChange and PDMWorks, into Kinnosa, helping to speed implementation while reducing installation and deployment costs.

Enterprise Document Management, powered by Kinnosa, SP2 is immediately available from First Trace and authorized First Trace resellers. For more information about Kinnosa or SP2, please call +1 480.940.2363 or visit www.FirstTrace.com.

To learn more about First Trace and the evolution of document management, visit <http://www.FirstTrace.com> or call +1 480.940.2393.

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Geomagic Studio 10 Now Shipping

23 January 2008

Geomagic is now shipping Geomagic Studio 10, the latest version of its digital reconstruction software, and offering a free 90-day trial through www.geomagic.com.

Geomagic Studio 10 features an optional surfacing module called Geomagic Fashion that automatically extracts design intent from scanned physical objects. It also includes an enhanced graphical user interface, streamlined feature framework, multi-sensor metrology support, and a customizable architecture.

“Geomagic Fashion makes it easy to go quickly from scanning to CAD-ready surfaces,” says Mark Hankins, project engineer for Winfield Consumer Products, the maker of Husky Liners protective products for cars and trucks. “It should further speed our product development cycle, which was already improved dramatically six months ago when we implemented Geomagic Studio 9.”

“The ‘wow factor’ is Fashion’s sheer speed in identifying planes, radiuses and free-form shapes directly from scan data,” says Greg Groth, reverse engineering manager for Advanced Design Concepts (ADC), which has provided product development services for companies such as Harley-Davidson, Briggs & Stratton and Fiskars. “I’m amazed by how fast this software enables you to build surfaces.”

Recreating the original aesthetics

The new Geomagic Fashion module is the perfect complement to Geomagic Shape, the module used worldwide to digitally reconstruct exact digital models of physical parts. Geomagic Shape provides the fastest, easiest way to digitally reconstruct a physical part as it exists, generating a watertight NURBS model. Geomagic Fashion automatically recreates the original surface aesthetics that are often lost in the manufactured or scanned object.

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Surface models from Geomagic Fashion are output in CAD-ready layouts for smaller IGES/STEP files, faster CNC code generation, and improved machining. Analytic surfaces and profile curves from Geomagic Fashion can be further manipulated in CAD, reducing the amount of time required to create a parametric CAD model.

Major new features

In addition to the Geomagic Fashion module, Geomagic Studio 10 includes the following new features:

- An enhanced GUI with user-configurable display themes, sliders and collapsible menus for a cleaner, less-cluttered workspace.
- A streamlined feature framework with more powerful tools to create, review, modify or leverage features throughout the entire digital reconstruction workflow.
- Multi-sensor metrology support for users who wish to take advantage of the combined strengths of 3D scanners and hard probes. Geomagic Studio 10 enables users to quickly capture a full 3D scan of an object and then use a hard probe to create features such as cylinders, cones and spheres, and measure out-of-sight areas for precise shape capture.
- An agile architecture that enables customization for specific applications and tasks.
- New extension editing capabilities that speed and improve surface generation by enabling users to make global adjustments such as resizing, repositioning and smoothing extension lines.
- Advanced hybrid-modeling capabilities that allow users to output idealized profile curves and extract both swept (extruded, revolved) and analytic (cylinders, spheres, planes, cones) surfaces from scan data, and then export into a CAD system to build a parametric model.
- A 64-bit edition that allows users to take advantage of the expanded memory capacity of 64-bit computer systems to process huge datasets generated by the newest generation of non-contact 3D scanners.

Geomagic Studio 10 can be purchased with and without Geomagic Fashion. The software ships with both 32- and 64-bit editions on the CD, and supports English, German, French, Italian, Spanish, Chinese and Japanese. Special introductory pricing is available through June 2008 for existing customers who wish to upgrade, as well as for new buyers. Visit www.geomagic.com for more information, the free 90-day trial, and a list of international offices and resellers.

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Magma Introduces 3D Small-Area Analysis Option to Knights Camelot Failure Analysis Software

23 January 2008

[Magma® Design Automation Inc.](#) introduced 3D Small-Area Analysis, an option to Magma's Knights Camelot™ CAD navigation failure analysis software that helps fab engineers locate potential circuit failures faster, accelerating yield improvement within the semiconductor manufacturing environment.

With this new Camelot option, fab engineers are able to get a more accurate, detailed picture of device circuitry, including focused ion beam structures, so they can better understand how the circuitry will potentially affect device performance. With this data, engineers can more quickly locate potential defects and make corrections. When combined with Camelot's industry-leading failure analysis, design-debug and low yield analysis, 3D Small-Area Analysis helps fab engineers locate, analyze and debug

circuit failures faster, shortening the turnaround time for error correction and yield improvement.

"Camelot remains the industry standard for CAD navigation failure analysis because it offers a continually expanding number of add-on features that are critical for identifying potential failures and determining the origin of killer defects," said Ankush Oberai, vice president of Magma's Fab Analysis Business Unit. "The 3D Small-Area Analysis option adds yet another element to Camelot's arsenal of failure analysis capabilities, which is good news for fab engineers who must produce higher yields with smaller, more complex devices within tightening market windows."

Camelot: Standard for Failure Analysis

Magma's Camelot software system is the next-generation CAD navigation standard for failure analysis, design-debug and yield improvement analysis. Camelot optimizes the equipment and personnel resources of design and semiconductor failure analysis labs by providing computer interfaces and navigation capabilities for more than 50 different types of analysis and test equipment. Its application tools, features, options and networking capability provide a complete, integrated system for fast and efficient investigation and resolution of inspection, test and analysis jobs. Camelot also enables closer collaboration between product and design groups with failure analysis labs, thus dramatically improving time to yield and market.

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Magma, Mentor Graphics and Synopsys Deliver Unified Power Format-Based Products

21 January 2008

Magma Design Automation Inc., Mentor Graphics Corporation and Synopsys, Inc. announced that the three companies are now delivering low power EDA tools based on the Accellera-developed Unified Power Format standard, UPF 1.0. This includes a broad range of implementation and verification products from the three companies. This new UPF product support further enhances key low power capabilities in the companies' tools while expanding industry interoperability, especially when compared to other available options.

The three companies will present at an Accellera UPF Update during the System Design Forum 2008 at the EDS Fair in Yokohama, Japan on Jan. 24. This session will focus on the benefits of UPF for low power flows and tool interoperability.

The UPF standard enables end users to create a consistent, succinct, unified description of the low power design intent for use by EDA tools offering advanced features for design and verification of today's low power integrated circuits (ICs). This benefits designers in two key ways. First, UPF supports integrated low power design flows from RTL to silicon, enabling consistent low power design intent to be applied and used throughout the flow. Second, the UPF standard enables interoperability, so tools from over two-thirds of the EDA marketplace can be used together utilizing the same low power methodology and design specifications.

"It is good news that such a broad selection of tools is now supporting UPF," said Hartmut Hiller, senior director, design methodology at Infineon Technologies. "This milestone allows us to begin our UPF evaluations and hopefully the fast application for our world class low-power product portfolio."

"Power management is a key challenge for all leading-edge chip designs, whether they are targeted for wireless consumer devices or large compute servers plugged into the wall," said Kam Kittrell, general manager of Magma's Design Implementation Business Unit. "It's not sufficient for each EDA tool to

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handle these challenges individually-all the tools that make up the design environment, including implementation, verification and analysis, must do so in a consistent manner. UPF enables tool interoperability, allowing effective specification and power management across the entire design tool spectrum, and brings tremendous value to the design community."

"UPF came about from the low power design industry's challenge to Accellera to define an open, inclusive low power design format. Mentor Graphics and the EDA industry have embraced the UPF standard and are now delivering on the promise of design tool interoperability in low power design flows and the portability of low power design data," said Stephen Bailey, functional verification product marketing manager at Mentor Graphics. "The level of interest in UPF-based solutions portend a bright future for this new standard."

"The UPF Standard represents a win/win/win for industry interoperability and cooperation," said Rich Goldman, vice president of Strategic Market Development at Synopsys. "Design teams win from better low power flows and greater tool interoperability, EDA vendors win from a consistent Accellera/IEEE standard and the world wins from chips that consume far less energy. Through low power design, electrical engineers will be a major contributing factor in helping the world resolve its climate change challenges, and the EDA industry will help them get there."

Availability:

A number of EDA tools from a broad range of companies support UPF today. More specific information about product support for UPF can be obtained from each company. An overview of current support is available at: http://www.unifiedpowerformat.com/images/UPF_Solutions_Guide.pdf

About UPF:

UPF is the electronics industry standard for capturing and using low power design intent for design automation. UPF was ratified by the Accellera standards organization in February 2007 and now forms the basis of the IEEE standards project 1801, the standard for low power IC design and verification. The most recent UPF specification from Accellera can be found at

http://www.accellera.org/apps/group_public/documents.php?wg_abbrev=p1801

More general UPF information can be found at <http://www.unifiedpowerformat.com/>.

If you are interested in the IEEE-P1801 working group standardizing the low power format under the IEEE, visit:http://www.accellera.org/activities/p1801_upf/

Visit Magma Design Automation at <http://www.magma-da.com/>.

Visit Mentor Graphics at <http://www.mentor.com/>.

Visit Synopsys at <http://www.synopsys.com/>.

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Matching Moore's Law, Synopsys PrimeTime Delivers 2X Productivity Boost to Timing Signoff and Design Closure

23 January 2008

Synopsys, Inc. announced that the 2007.12 release of its PrimeTime® suite has set a new performance standard for both static timing and signal integrity analysis, accelerating turnaround time and design closure for today's nanometer designs. Broad improvements in design data reading and linking,

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intelligent disk caching, incremental timing updates and fine tuning of algorithms have resulted in an average 2X runtime improvement and 33 percent memory reduction over the 2006.12 release while maintaining golden signoff accuracy. These out-of-the-box performance improvements have been confirmed on a variety of designs ranging in size from 1 million to 40 million instances from customers such as Advanced Micro Devices, RMI Corporation and several other semiconductor companies.

"As a leading provider of complex SoCs for Digital Consumer, Wireless, Networking and Security markets, RMI Corporation must adhere to very aggressive design schedules to meet our market windows," said Ramon Macias, director of Physical Design, RMI. "Using the 2007.12 release, the runtime for the PrimeTime SI tool dropped from three hours to one hour. More importantly, the time taken to load the design netlist and parasitics was reduced from one hour to five minutes, allowing us to use the PrimeTime application interactively rather than reverting to a save session. This productivity boost enables us to analyze multiple engineering changes in the length of time previously required for a single iteration."

"Synopsys continues to provide industry leadership by setting a new standard for performance and capacity in our gold-standard PrimeTime signoff solution," said Robert Hoogenstryd, director of marketing for Design Analysis and Signoff at Synopsys. "These latest enhancements build on the PrimeTime suite's ability to deliver the advanced static timing and signal integrity analysis that is essential to all design flows, while helping today's designers keep pace with Moore's law."

[Synopsys](#) will deliver a tutorial at the Synopsys Users Group (SNUG) San Jose 2008 event covering further techniques for reducing runtimes beyond the 2X out-of-the-box performance improvement of the PrimeTime 2007.12 release. SNUG San Jose 2008 will take place from March 31 through April 2, 2008 at the Santa Clara Convention Center in Santa Clara, Calif.

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Mentor Graphics Delivers the Industry's First Physical Synthesis Solution for Altera Stratix III Device Family

17 January 2008

[Mentor Graphics Corporation](#) announced that its Precision® RTL Plus product includes the industry's first vendor-independent physical synthesis to support the Altera® Stratix® III product family of high-performance, high-density field programmable gate arrays (FPGAs). Altera's internal testing found that designs that benefit from Mentor's Precision RTL Plus product achieved performance improvement of over eight percent for Stratix III designs, compared to Precision Synthesis. Therefore, the Precision RTL Plus product can help users achieve faster timing closure, which could lower overall FPGA design development costs.

"Precision is the only vendor-independent tool with physical synthesis support for our high-performance FPGA family," stated Danny Biran, senior vice president of corporate and product marketing for Altera. "The addition of Stratix III support will allow our mutual customers to get better timing results and to benefit from other unique Precision RTL Plus capabilities, such as automatic incremental synthesis and resource allocation."

Altera and Mentor Graphics have worked closely together over the last six months, ensuring that their mutual customers will benefit from the increased productivity and comprehensive design synthesis support in using the Precision RTL Plus product for Altera Stratix III devices. Mentor's support for Stratix III devices is available now with the Precision 2007a Update 1 and later versions, and it is

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compatible with Altera Quartus® II design software version 7.2 and above.

“We are committed to supporting Altera devices with intuitive high-performance synthesis solutions, and we recognize how important the Stratix III device family is for high-end FPGA applications,” stated Simon Bloch, general manager, Mentor Graphics design and synthesis division. “The benchmark results that Altera provided us confirmed that Precision RTL Plus keeps improving the quality of results for Altera devices.”

Precision Synthesis: The Centerpiece of Mentor Graphics FPGA Flow

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

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Mentor Graphics Unveils Next Generation of TestBench Xpress - Industry's Commercially Proven Virtual Emulation Solution

22 January 2008

Mentor Graphics Corp. announced the third generation of TestBench Xpress™ (TBX), the industry's only commercially proven RTL-accurate virtual emulation capability that eliminates the traditional barriers of adopting hardware in-circuit emulation for system-level integration. When used in conjunction with Mentor's Veloce® family of hardware assisted verification products, TBX provides a software-based, cost-effective and efficient way to perform hardware-software co-verification for embedded systems.

The third generation of TBX version delivers megahertz-class acceleration compliant with IEEE's Standard Co-Emulation Modeling Interface (SCE-MI 2.0). It is architected based upon SystemVerilog Direct Programming Interface to deliver up to 10,000X performance improvement over the fastest software simulator without compromising interoperability and debug visibility. It also provides backward compatibility with the previous generation standard -- SCE-MI 1.1. The new transaction compiler de-couples the software simulator from the high-performance Veloce family to accomplish an optimal mix of bandwidth and communication latency.

“As logic verification transitions to the system-level, it is necessary to have transaction streams from the real world that capture the complex interactions between the hardware, software and applications programs,” said Sanjay Sawant, director of marketing, Mentor Graphics Emulation Division.

“Traditional in-circuit emulation requires building customized rate adapters to bridge the real world speeds and the hardware-assisted system. TBX facilitates an acceleration environment wherein the driver code and application programs directly interact with the RTL design running inside the Veloce emulator. This enables users to verify their RTL, prior to tape-out, in the context of application software. This approach removes barriers to adopting hardware-assisted verification and makes it cost effective for the broad market.”

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Productivity-enhancing Features

The new TBX comes with a series of productivity enhancement features to allow integration with existing functional models as well as high-level architectural models coded in C/C++, SystemVerilog or SystemC.

- * Optimal performance due to ability to perform streaming transactions to and from SystemVerilog based implementation using Transaction Pipes as mandated by the SCE-MI 2.0 standard. TBX completely supports both SCE-MI 1.1 and SCE-MI 2.0 standards. Various clock optimizations in TBX allow ICE-like performance and throughput in transaction based target-less applications.
- * Broad language support, allowing users to develop their test environment and complex SoCs with newly added HDL and SystemVerilog language constructs that extends the support over and above synthesizable subset of SystemVerilog for higher efficiency and productivity.
- * Efficient and standards compliant modeling for transaction based verification with un-timed test environment modeled in C/C++/SystemC and timed transactors and complex SOC DUT modeled in SystemVerilog provides for increased productivity while maintaining MHz class performance.
- * Language compliance with the SCE-MI standard, via a transactor linting mechanism that automatically checks the language compliance with the SCE-MI standard and generates detailed reports to facilitate development of performance optimal transactors.
- * Debug productivity in conjunction with the built-in debug infrastructure of Veloce hardware-assisted engine, providing simulation-like debug environment with full visibility overall design signals and module-level control of system tasks.
- * Efficient database management enabling simultaneous usage of a design database by several users without consuming additional disk space. This facilitates optimal usage of the disk space as users deploy multi-million gate chips through transaction driven verification.
- * Cost-effective scalability. Soft models built for TBX provide unsurpassed flexibility and avoid additional board and hardware development, which are typical during traditional emulation projects. Eliminating the need to develop and maintain target systems for each project minimizes direct costs and saves engineering resources for debugging platforms under development.

Pricing and Product Availability

The TBX is available either through purchase or time-based rental. In the US, the list price for TBX, which is an add-on option to Veloce, starts at \$120,000. Supporting Linux and SuSE 10.0, the TBX is available for production use effective immediate. For product information on Mentor's network verification platform, contact your Mentor Graphics sales representative, call 1-800-547-3000, or visit <http://www.mentor.com/med>.

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Oracle Unveils Oracle® Product Information Management for Retail

14 January 2008

[Oracle](#) announced the availability of Oracle(r) Product Information Management for Retail, an innovative master data management application that allows global retailers to create a single, enterprise view of all product information to help unlock value from within the business. Oracle Product

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Information Management for Retail helps retailers improve operational efficiencies, accelerate the speed-to-market of new product introductions and service offerings across different channels, improve customer intimacy and automate collaboration with trading partners.

As the industry continues to experience a dramatic transformation and the channels of retailing expand, retailers are being forced to devote significant time and resources to addressing data quality issues. These efforts are cutting into their profits and negatively impacting the bottom line as a result of factors such as wasted labor and lost productivity. Making matters worse, ignoring the data quality problem is not an option as it can lead directly to missed sales, lost market share and customer dissatisfaction when products are unavailable or slow to reach the shelf.

Oracle Product Information Management for Retail integrates, standardizes and synchronizes fragmented product data from multiple systems into a single, central data repository. As a result, the solution is able to deliver a trusted source of product information. This is especially useful for retailers with multiple item masters, multiple sales channels or those who require data synchronization with suppliers. Retail mandates around the use of Global Data Synchronization Network (GDSN) standards have proven to be catalysts for many retail product information initiatives. Key features of Oracle Product Information Management for Retail include:

- * New Product Induction and Product Synchronization: enables retailers to synchronize product information with information from their suppliers to help reduce errors and improve overall data quality
- * Automated Syndication through GDSN: out-of-the-box certified solution for GDSN and 1Sync data pool
- * Collaborative Processes: allows the extended retail enterprise and third parties to be involved in the product setup process
- * Flexible Attributes and Content Management: helps retailers maintain all of the various attributes that products have across different channels within a single system
- * Flexible Configuration: allows the user experience to be tailored to user roles and provides for a streamlined, secure process
- * Unstructured Data Management: maintains information from various formats in the same repository and automates integration of data and services between internal applications to help ensure data integrity
- * Broad Data Quality Tools: maintains a clean, accurate single source of the truth
- * Open-standards based integration architecture: distributes accurate information to the extended enterprise

"Oracle Product Information Management for Retail builds on Oracle's commitment to provide global retailers with innovative solutions that address their most critical business imperatives and deliver measurable value," said Hardeep Gulati, Vice President PLM and PIM Product Strategy, Oracle. "We see a significant opportunity to help retailers and their suppliers become more profitable and deliver increased shareholder value from leveraging a single source of accurate product information."

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Pointwise Partners with DreeseCode Software

14 January 2008

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Pointwise is announcing a new collaboration with DreeseCode Software, makers of the DesignFOIL software for airfoil and wing design and preliminary analysis. The collaboration includes DreeseCode's addition of Gridgen export to DesignFOIL and Pointwise's addition of a script for automatic CFD grid generation to their Glyph Script Exchange.

"We are thrilled to be working with a domain expert like DreeseCode," said John Chawner, Pointwise's president. "Through our partnership, we can facilitate the path to CFD for their customers by providing an automatic meshing application." Pointwise's Glyph scripting language lets customers and partners develop macros and templates for Gridgen. A fully automatic meshing template for DesignFOIL has been developed and posted to the Glyph Script Exchange on Pointwise's web site.

John Dreese, president of DreeseCode Software LLC, said "Gridgen is the industry standard for preprocessing. And having a standard allows 3rd party developers like DreeseCode Software to focus on the niche specialties that we do best. Partnering with Pointwise is a win-win situation for all of our customers. Working with Pointwise has been very pleasant; the staff is knowledgeable, personable, and focused on customer satisfaction."

About Pointwise:

Pointwise is solving the top problem facing engineering analysts today: mesh generation for computational fluid dynamics (CFD). Pointwise, Inc.'s Gridgen and Pointwise software generate structured, unstructured, and hybrid meshes; interface with CFD solvers such as FLUENT, STAR-CD, and ANSYS CFX as well as many neutral formats such as CGNS; run on Windows (Intel and AMD), Linux (Intel and AMD), Mac, and Unix; and have scripting languages that can automate CFD meshing. Large manufacturing firms and research organizations worldwide rely on Pointwise for their complete CFD preprocessing solution. More information about Pointwise and Gridgen are available on Pointwise's web site, <http://www.pointwise.com>.

About DreeseCode: DesignFOIL from DreeseCode Software LLC is an airfoil generation, analysis, and export application for the Windows platform. Release 6 of DesignFOIL was developed over three years with the main goals of user-experience, utility, accuracy, work-flow and affordability. Utilizing many of the original NACA formulas, DesignFOIL generates airfoils to your specifications and point concentrations. It also allows you to import airfoil coordinate files, manipulate them (camber, etc.), analyze them, put them in a simulated wing, export them to your favorite 3D CAD software directly or send them to Gridgen and use the Glyph-based grid-automation scripts.

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SpringCM Delivers Newest Version of its On-Demand Document Management and Workflow Solution

9 January 2008

SpringCM, the leader in on-demand document management and workflow, announced the availability of SpringCM 4.1, the newest version of the company's document management and workflow software as a service. This new version offers significant enhancement to features that enhance business productivity, including major updates in search, advanced view and markup, preview mode and electronic signatures.

Highlights of SpringCM 4.1 include:

Electronic Signature Integration — Rather than physically mailing or faxing documents like contracts that require signatures, SpringCM's Electronic Signature feature enables documents to be signed

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electronically, even by people who are not SpringCM licensees. Documents may be sent for electronic signature with a single click in SpringCM - the recipient receives an e-mail containing a link to the document and the steps required to complete the electronic signature. If a written signature is required, the recipient can fax a paper copy to a toll-free number. Regardless of signature method, the signed document is automatically stored as the latest version back in the SpringCM repository.

Advanced View and Mark-up — SpringCM now supports CAD, MS Project, Microstation and 85 other proprietary drawing, document and imaging formats. Thanks to Advanced View and Mark-up, annotating proprietary document formats doesn't have to mean hand-editing printed copies and writing lengthy e-mails with confusing revision steps. Advanced View and Markup expedites the review and comment cycles by extending the annotation capabilities of SpringCM beyond hand-editing printed copies or the "sticky notes" annotation, already available within the system. Areas of concern can be circled, or marked with a variety of "stamps" (like directional arrows and names) and highlight points that need further development. Annotations are always viewable but are not saved in the actual document, ensuring an unaltered version is always available. Users who do not have the specific application can now contribute their comments on project plans, complex Visio diagrams, CAD files and many other formats.

Enhanced Preview Mode — Based on customer feedback and cutting-edge Web 2.0 design, SpringCM's Document Preview features have been upgraded to better serve collaboration and indexing needs. Lock Zoom enables the user to focus on a fixed area of a document as pages are scrolled. To allow for more horizontal workspace, the left and right panes are now collapsible. The Information Panel buttons are wired with hot keys to further expedite indexing.

Expanded Advanced Search — New collapsible and expandable menu options display only the Advanced Search options that are relevant to specific business needs. SpringCM retains the Advanced Search display options after every modification. Basic, Personal and Account views are provided to introduce a new level of configuration to the Search menu. An intuitive selection process is used to include and exclude specific attribute groups in search results.

Dan Carmel, CEO of SpringCM, stated, "The new features of SpringCM Version 4.1 will help organizations streamline critical signature processes in areas like contract and proposal management and document collaboration for dozens of file formats such as MS Project, Visio and CAD files. Our customers have come to expect rapid innovation and SpringCM 4.1 delivers customer-driven enhancements in search and document viewing that demonstrate the benefits of using Software as a Service. Version 4.1 continues our history of delivering comprehensive content management solutions at a fraction of the cost of on-premises systems."

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STARC Releases 'Pride' Reference Design Flow Using Cadence Low-Power and DFM Solutions

21 January 2008

Cadence Design Systems, Inc. announced that Japan's Semiconductor Technology Academic Research Center (STARC) has released its next-generation ultra low-power "PRIDE" reference flow V1.5, incorporating the Common Power Format (CPF)-based Cadence Low-Power Solution. This reference flow also includes key litho-aware manufacturing (DFM) technologies from [Cadence®](#). The release follows months of rigorous development and testing by STARC engineers using multiple test designs. This reference flow is expected to provide significant power savings, yield enhancement and time-to-

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market advantages for STARC members producing high-volume consumer, communications and mobile electronic devices on 65- and 45-nanometer processes.

"The STARC PRIDE V1.5 Flow incorporates numerous requirements from our member companies for an advanced ultra low-power solution and an optimized DFM methodology," said Nobuyuki Nishiguchi, vice president and general manager of STARC. "The CPF-based Cadence Low-Power Solution delivers a fully automated flow for the architectural exploration, design, verification and implementation of low-power SoCs. The PRIDE V1.5 Flow also takes advantage of Cadence's DFM technologies to reduce overall design time and increase production yields for high-volume designs."

Targeting 65- and 45-nanometer designs, the PRIDE V1.5 Flow incorporates the CPF-based Cadence low-power design solution supported by Cadence's Incisive® and Encounter® platforms to provide an automated and holistic low-power design flow from RTL design through GDS II tape-out. PRIDE V1.5 enables front-end designers to explore physical prototyping with different CPF files and a single golden RTL, allowing low-power architecture optimization. In pilot designs, using the CPF-based Cadence Low-Power Solution STARC has confirmed 3X improvement in design time for architectural exploration to floorplan for low-power chips that employ advanced power management techniques such as multi-supply voltages and power shut-off. In addition to design productivity improvements, these techniques enabled up to 40% power reduction in the pilot designs.

Cadence's DFM technologies include Model-based Verification, Litho Physical Analyzer, Litho Electrical Analyzer, CMP Predictor and Chip Optimizer technologies, which allow designers to analyze, optimize and correct potential yield limiters early in the design process, including physical and electrical effects produced during lithography. Cadence's comprehensive model-based manufacturability solutions provide analysis of IP and full-chip designs for random and systematic manufacturing variations to prevent any catastrophic or parametric failures before tape-out. This enables "What You Design Is What You Get" (WYDIWYG) design for manufacturability to designers using advanced-node technologies.

"STARC and Cadence worked closely to implement and validate this DFM-aware low-power design flow and deliver an optimized design methodology to our customers," said Chi-Ping Hsu, corporate vice president of IC Digital and the Power Forward Initiative at Cadence. "This CPF-based reference flow provides STARC members with the industry's only end-to-end, integrated low-power solution incorporating an advanced DFM methodology."

CPF is a Si2 standard format for specifying power-saving techniques early in the design process—enabling sharing and reuse of low-power intelligence throughout the design process. The Cadence Low-Power Solution is the industry's first complete flow that integrates logic design, verification, and implementation with the Si2-standard Common Power Format. This low-power solution has been available to designers for more than a year and has been used in more than 50 customer tapeouts worldwide.

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Synopsys and Acceleware Deliver Hardware Accelerated Solution for Design of Optoelectronic Devices

22 January 2008

[Acceleware Corp.](#) and Synopsys, Inc. announced a new hardware solution that enables up to 20-times faster electromagnetic simulation of optoelectronic devices such as CMOS image sensors. The solution, which links Synopsys' technology-leading TCAD Sentaurus™ Device simulation software and

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Acceleware's ClusterInABox Quad Q30 workstation, enables an order-of-magnitude speed-up of the high accuracy finite-difference time-domain (FDTD) electromagnetic modeling algorithm used in Sentaurus Device. This performance increase allows engineers to leverage the rigor and accuracy of the FDTD method in designing and optimizing optoelectronic devices while shortening the product development cycle. Synopsys and Acceleware will demonstrate the joint solution at Photonics West 2008 (Jan. 19-24, 2008, San Jose, CA) in Synopsys' booth #6067.

In the rapidly growing optoelectronics market, manufacturers are under constant pressure to produce higher performance devices in a shorter time. For example, CMOS image sensors, which are used widely in camera phones, webcams, digital cameras, and camcorders, have to pack more pixels into each device generation, as well as be cost-effective to produce. TCAD tools are well-suited for optoelectronics manufacturers designing more sophisticated devices and performing complete characterization of their device structures over a wide range of light incidence angles, lens shapes, pixel sizes, and other factors prior to manufacturing. This high-performance, cost-effective solution also allows the statistical analysis of the impact of manufacturing variations, such as lens misalignment, through multiple simulations.

Due to the complex nature of optoelectronic devices, FDTD simulations typically require tens of hours to fully characterize a CMOS image sensor design in 3D. The new hardware acceleration solution reduces the FDTD simulation time by up to 20 times, allowing engineers to carry out more extensive simulation studies, reducing development costs and time. TCAD Sentaurus Device simulation software utilizes the ClusterInABox Quad Q30's built-in NVIDIA graphics processing units (GPUs), which deliver up to two Teraflops of computational power, to significantly accelerate FDTD simulations of optoelectronic devices.

"The collaboration between Synopsys and Acceleware brings powerful TCAD simulation capabilities to our mutual customers, who are constantly looking for ways to reduce costs and time in developing advanced semiconductor devices," said Terry Ma, group director, TCAD Business Unit at Synopsys. "Customers can now take advantage of this combined software and hardware solution to explore more design options and to optimize performance, manufacturability and yield for these complex optoelectronics device structures."

"Process and device engineers are continuously challenged with improving product performance in a shorter development cycle," said Ryan Schneider, Acceleware's chief technology officer. "Our desk-side supercomputing solutions provide the fastest FDTD processing on the market, opening up new possibilities in innovation and product delivery for engineers working with Synopsys' sophisticated TCAD solution. The end result for manufacturers of optoelectronic devices is the ability to deliver higher quality products to their customers more quickly, without raising costs."

Availability

The [Synopsys](#) interface, TCAD Sentaurus™ Device EMW-X, is now available through TCAD Sentaurus™ Device EMW. The ClusterInABox Quad Q30 workstation is available for purchase directly from Acceleware. To view a demo of this joint solution from Synopsys and Acceleware, please visit booth #6067 at Photonics West, or visit:

http://www.synopsys.com/news/events/conference08/photonics_west08.html for more information.

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Synplicity's Synplify Premier Platform Delivers Additional Time-To-Market Benefits and Expanded Device Support for FPGA Designers

24 January 2008

Synplicity®, Inc. announced that its Synplify® Premier software has been enhanced to provide more time-to-market benefits to designers using high-density FPGAs. In release 9.0, the company's graph-based physical synthesis technology has been optimized for Xilinx Virtex-5 FPGAs to deliver exceptional timing closure, analysis and debug for these advanced devices. This latest release extends the graph-based physical synthesis technology which has been implemented for Xilinx Spartan-3, Virtex-II Pro and Virtex-4 FPGAs for more than two years. Synplicity also announced it has extended these benefits to FPGA designers targeting Altera Stratix-III, Stratix-II and Stratix-II GX FPGAs, through the company's Synplify Premier Beta Program.

Unlike other solutions, Synplify Premier 9.0 gives users the most accurate timing information and insight into debug performance-related issues immediately following synthesis. Designers won't have to go through the hours of place and route, typical in traditional flows, to get detailed timing information. Once the designer is happy with the results, placement from the Synplify Premier software is passed to place and route to ensure deterministic results and thus the fastest timing closure. In addition to providing an optimal solution for timing closure, Synplify Premier 9.0 provides several algorithmic QoR enhancements and productivity boosting features such as a new user interface, additional SystemVerilog constructs and a new module generation capability.

Synplify Premier 9.0

Andy Haines, senior vice president of marketing at Synplicity notes, "The Synplify Premier Platform is a comprehensive environment for FPGA design comprising a variety of tools and technologies that provide improvement in analysis, DSP implementation, debug and productivity needed to successfully complete today's high-density designs. We worked very closely with our FPGA partners to ensure that Synplify Premier 9.0 supports the intricate architectural elements of these advanced 65-nanometer devices. We are excited to offer graph-based physical synthesis to Virtex-5 designers through Synplify Premier and to Stratix III designers through our Beta Program."

Robust FPGA Design Platform Integrates a Variety of Features

Synplicity continuously works to expand the breadth of its synthesis technology to provide the most robust platform for FPGA implementation and design. The Synplify Premier Platform is a complete environment offering a range of features including RTL analysis, source-level debug, HDL analysis, advanced floorplanning, physical analysis, module generators and optimizations for DSP design. The Synplify Premier solution is also a platform for implementation and debug of ASIC and SoC prototypes using a single FPGA.

With the release of Synplify Premier 9.0, Synplicity offers additional features for improved productivity. For example, Synplicity has expanded its SynCore IP generator to support FIFOs in addition to RAMs. Designers supply parameters to indicate the size and type of RAM or FIFO and the IP generator wizard automatically creates technology independent RTL ready for synthesis into an FPGA. These features allow designers to avoid handwriting RTL or using technology dependent memory instantiations for these functions.

Additionally, Synplicity continues to extend its support for the SystemVerilog language. New SystemVerilog features in release 9.0 include:

- Array assignments (packed & unpacked)
- Arrays as arguments to functions, tasks and modules
- Declarations in for-loop
- Port declarations for multiple dimensions
- Default argument types
- Argument by names

Graph-Based Physical Synthesis Key to Addressing Timing Closure

In order to fully address timing closure, designers must have highly accurate timing correlation between what a tool estimates and the final, actual timing. The only proven way to get this timing correlation is to perform detailed placement and routing during logic optimization and also to have access to FPGA-specific routing information (routing graph a.k.a. graph-based). Synplicity's graph-based physical synthesis is the only product on the market that performs final detailed placement of logic during optimization, and therefore, is the only tool that successfully addresses timing closure. Actual testing on customer designs has shown that graph-based physical synthesis provides timing correlation within 10 percent of final post-route timing on over 90 percent of designs resulting in fewer design iterations, less time to completion, and logical and physical optimizations on the actual critical paths of the design.

Unlike other solutions, Synplicity's patented, and award-winning graph-based physical synthesis technology merges logic optimization, placement and routing estimates into a single process which is used alongside a highly accurate interconnect timing graph (database) to help ensure a design's critical paths use the fastest available routing resources in the target device. This is the only physical synthesis solution that creates detailed placement for all logic which is then passed on to the vendor tool for final routing.

"The new Synplify Premier product highlights the ongoing benefits of the strong relationship between Xilinx and Synplicity and their work in the Ultra High-Density Task Force. It also signifies Synplicity's ongoing commitment to supporting the advancing requirement of FPGA devices," said Hitesh Patel, director of Software Product Marketing at Xilinx. "While the architecture in the Virtex-5 devices provides the industry with clear advantages for ultra-high density design, it did require close attention by Synplicity to marry these benefits with its FPGA design platform. The company came through with a solid solution that not only provides new productivity benefits, but also addressed our primary requirement for improved timing closure."

New Algorithmic Changes Improve Performance, Area and Cost

Synplify Premier 9.0 is enhanced with algorithmic changes supporting the sophisticated architectural and routing structures for improved performance and area utilization reducing device cost. The huge capacity of 65-nanometer devices, coupled with new architectural features, complex routing and high-capacity memory structures can achieve even greater quality of results through the use of specialized synthesis tools with customized algorithms. Synplicity's physical synthesis software features a unique direct-mapping technology employing a variety of sophisticated new heuristics tailored to minimize the number of logic elements used while still meeting timing objectives.

ASIC Prototyping with FPGAs:

As ASIC designers increasingly depend upon FPGAs to prototype all or part of their designs, there is a need for a synthesis and verification environment that can take HDL code written for an ASIC and

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efficiently implement it in an FPGA. The Synplify Premier platform accommodates this by performing automated gated-clock conversion handling of generated clocks and Synopsys DesignWare® components. Synplify Premier software addresses single FPGA prototypes, while Synplicity's Certify® RTL prototyping product enables multiple FPGA prototypes with advanced partitioning and pin multiplexing technology.

Pricing and Availability

Synplify Premier 9.0 is now available. Pricing for the design environment starts at \$54,000 (USD). Synplify Premier software customers who are on active maintenance will receive the 9.0 release at no extra cost. Designers interested in participating in the Beta Program, please contact your Synplicity sales representative. For more information, visit Synplicity's Web site at <http://www.synplicity.com>.

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Visiprise Partners with Tata Consultancy Services to Deliver Innovative Manufacturing Solutions

23 January 2008

Visiprise, Inc. announced that it has partnered with Tata Consultancy Services (TCS). Visiprise and TCS will work in collaboration with SAP AG through its efforts aimed at helping manufacturing customers achieve the 'perfect plant', providing discrete manufacturers with an industry-leading MES solution to enable a tightly-integrated technology ecosystem.

[Visiprise](#), through its formal reseller agreement with SAP AG, will deliver the SAP® Manufacturing Execution application by Visiprise, an MES solution that provides route enforcement, traceability and shop floor execution capabilities. The solution is integrated with the SAP ERP application through the SAP Manufacturing Integration and Intelligence (SAP MII) application to provide manufacturers with better visibility into production operations.

TCS, through its Global Network Delivery Model™, will deliver 'one stop' domain expertise to integrate shop floor information into enterprise systems, enabling manufacturers to consistently meet their business objectives.

"The combination of deep domain expertise of TCS in integrating shop floor information to the enterprise and the capabilities of SAP and Visiprise allow manufacturers greater visibility, tighter integration and optimization of their shop floor information." said Regu Ayyaswamy, VP, Engineering and Industrial Services, TCS. "The Visiprise-TCS partnership will provide significant value to customers that want to drive both global coordination and local execution across their manufacturing networks."

The companies will formally launch their collaboration through the Perfect Plant center of excellence, designed as a virtual manufacturing scenario lab and operated by a global "virtual team" from TCS and SAP. The center of excellence was formed to help manufacturers achieve the perfect plant by combining global manufacturing coordination with local execution to improve end-to-end manufacturing operations and financial performance.

"Visiprise and [TCS](#) have demonstrated tremendous success working with SAP to leverage the SAP xMII composite application as a manufacturing operations platform," said Mike Wendell, vice president, Manufacturing Solutions at SAP America Inc. "Customers and SAP partners can effectively fast-track

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new ideas leveraging SAP applications and Visiprise manufacturing execution at the Perfect Plant center of excellence. Combined with global services expertise from TCS, this enables a fast, effective implementation and quicker time to benefit for our joint customers.”

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WorkPLAN Enterprise: New Flagship ERP Software From SESCOI

January 2008

[SESCOI](#) announced the general release from January 2008 of WorkPLAN Enterprise - a new generation ERP system designed for custom manufacturers and companies that work on a project or engineer-to-order basis. A successor to the WorkPLAN industry solution, WorkPLAN Enterprise offers complete functionality and tools to meet the specific requirements of the mold, die, tool, model, pattern, prototype and special machine making industries.

SESCOI has capitalized on its 20 years' expertise in the engineering sector in the development of WorkPLAN Enterprise. By combining ease of use with industry best practice, and by eliminating the complexity often associated with ERP systems, SESCOI has built the system the industry has been waiting for.

WorkPLAN Enterprise brings together the functions often carried out by disparate software packages, unifying quotation, purchasing, stock, planning, sales processing, quality, time and performance management into a single ERP system. The user-friendly interface is common for all modules and enables the integration of tasks, and elimination of duplicate data entry. The result is greater visibility across the whole manufacturing process, allowing companies to be more reactive and operate at optimum efficiency.

By completely re-engineering the original software and basing it on a MySQL® database, SESCOI has developed an ERP system with faster operation, greater reliability and an open structure capable of linking with external systems. Popular Microsoft Office products such as MS Excel®, MS Word® and MS Project®, CAD & CAM systems, accounting packages and other ERP systems can all interface with WorkPLAN Enterprise, maximizing customers' investment in existing software and minimizing implementation effort through the capture and reuse of existing knowledge.

SESCOI knows that the highest priority amongst its ERP users is ease of use. WorkPLAN Enterprise's new intuitive interface includes a centralized data tree, drag and drop capability and uncluttered screens. This allows users to see complete project data in one place in a clear and concise way. To make operation even more user friendly, personalization tools allow the system to be tailored to the requirements of each company. Context sensitive help and tutorials further add to the rapid take up of the software, ensuring that the implementation is quick and that the software is fully utilized by staff at all levels.

Intelligent tools feature throughout WorkPLAN Enterprise. :

To ensure accuracy and speed of quoting, the system includes an integrated CAD data analyzer and a direct interface to CAM software. Users can also set up their own technical characteristic criteria for each project allowing them to quickly quote for a new job or find, copy and paste information from previous comparable projects or quotes.

The quality management module enables ISO compliance, monitors non-conformance, ensures traceability and enables supplier evaluations.

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Scheduling, Gantt charts, and time management provide real time shop floor reporting, throwing up alarms for deviations from delivery or cost targets. Business key performance indicators are also continually updated from the live data held in WorkPLAN Enterprise. This ensures that managers have a thorough understanding and control of their business at all times.

Bruno Marko, President of SESCOI said, “WorkPLAN Enterprise is unique in that it has been designed by specialists for companies that operate in the same industry as itself. SESCOI’s depth of industry knowledge and experience ensure the system is not only quickly and successfully implemented but also fully exploited every day by our customers, giving them fast return on their investment and quickly improving their competitive position”

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ZWCAD Version 2008 Released

22 January 2008

ZWSOFT, developers of advanced CAD tools, announced the release of its latest signature 2D/3D package, ZWCAD 2008. The new version provides updated features for improved flexibility and efficiency, greatly enhanced speed, as well as seamless DWG compatibility.

This comprehensive CAD system represents a perfect low-cost alternative to AutoCAD®. Users can open, edit and save DWG/DXF files created in AutoCAD (2.5-2008), without the need for manual import or export operations. Likewise, this automation also enables users of AutoCAD to open files created in ZWCAD.

The 2008 version delivers a host of improved functionality. What’s new includes:

Speed

Make a great promotion in performance, especially opening or saving a drawing, creating a hatch with complex boundaries, editing in layout with multiple viewports or selecting a huge number of objects, which will make your work more efficient.

- Speed of Open function has been increased about 30%.
- Speed of Save function has been increased about 70%.
- Speed of Select function has been increased about 10 times.
- Performance of Multiple Viewports in layout has been increased about 10 times.

Brand-new Algorithm for Efficient Hatch Boundary Search

A newly developed algorithm in ZWCAD 2008 means less calculation and faster response even over a wide range of objects, increasing search speed by about 15 times. Furthermore, it can also uncloset boundaries in some corrupted drawings automatically. Now hatch processes work more conveniently than ever.

Design Center

Improved Design Center offers you a convenient way to manage the issues of your drawing, such as dimension style, blocks, text style, line types and layers. Just drag and drop, and apply them from any source drawing to your current drawing. Source drawings can be on your computer or on your local network. In addition, you can also search drawings according to drawing name or drawing size. With the

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Design Center, you can use the information of other drawings in your current drawing instantly.

Quick Calculator

The QuickCalc includes basic features similar to most standard mathematical calculators. In addition, QuickCalc has features specific to ZWCAD, such as geometric functions, scientific functions, and features to handle variables, units conversions, and text calculations.

Other major enhancements in the new version include Merge Print (mprint), Attribute Extraction, Block Extraction, and Dimension Replace.

Designers, engineers, and architects can discover the improved power and function of ZWCAD 2008 by downloading a free trial of the application at <http://www.zwcad.org>.

ZWCAD 2008 runs on Windows 2008, Windows XP, and Windows Vista. ZWCAD costs only a fraction of AutoCAD, while offering similar functionality and full DWG compatibility. Today, more than 60,000 customers around in 60 countries choose ZWCAD to reduce their CAD budget and increase their design productivity. ZWCAD customers include many Fortune 500 companies such as Honda, Alcatel-Lucent, CIMS, GP, THORN, GE , among others.

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