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CIMdata News

CIMdata in the News: “Delmia Pushes Its Digital Manufacturing Software Beyond Automobiles”

4 May 2011

The advantages of digital manufacturing are discussed in the article “[Delmia Pushes Its Digital Manufacturing Software Beyond Automobiles](#)” featured in the May 4 issue of Xconomy.

The author, Thomas Lee, cites CIMdata’s research findings to enlighten the readers about digital manufacturing’s ROI:

“Manufacturing productivity must be ever increased and producers must constantly look for ways to meet the faster, better, cheaper mantra of today’s economy,” according to a report by CIMdata, a research firm in Ann Arbor, MI. “To meet these pressures and remain competitive, leading manufacturers are going digital.”

In the report [[Manufacturing Goes Digital](#)], CIMdata estimates that a company that annually invests \$5 million to \$10 million in digital manufacturing can save it \$50 million to \$100 million a year.

Mr. Lee’s article is available [HERE](#).

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Dassault Systems Acquires Enginuity (CIMdata Commentary)

3 May 2011

On 27 April 2011, Dassault Systèmes significantly upgraded their formulation, recipe, and specification management offering by acquiring Enginuity, a Connecticut-based software company. While no terms of the agreement were announced, the DS earnings call presentation suggests they spent no more than 30 million Euros for the acquisition.

In business since 1992, the privately-held Enginuity focuses on PLM solutions for the CPG, personal care, cosmetics, pharmaceuticals, and specialty chemicals industries. They support implementations in 26 countries, from 30 to more than 800 users. Enginuity has a strong customer list, including P&G, Revlon, Pfizer, Merck, Schering-Plough, AkzoNobel, and Clairol. According to Enginuity, their solution runs on multiple backend data management solutions. Their strong use of XML should make the move to ENOVIA straightforward. DS will continue to offer ENOVIA Specification Central to support some customer use cases. Specification Central is the specification management capability started at MatrixOne that has continued to evolve. Dassault Systèmes believes there are cases where recipe development is not required and that the existing solution remains a good fit for these.

By acquiring Enginuity, Dassault Systèmes now has an offering that can compete in multiple process-oriented markets, particularly those driven by formulas. These are some of the fastest growing markets in collaborative Product Definition management (cPDm), and this acquisition will enhance their competitive position. As with acquisitions of this type, it will be important for Dassault Systèmes to ensure that the Enginuity team and its ecosystem remain in place and to support the transition and on-going development.

The combination of ENOVIA V6 and Enginuity should provide strong support for both mechanical and

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process PLM elements of a complete product. The true test will be the solution's ability to manage interactions between products in development on each side of the system. Based on our work supporting industrial clients, this level of process integration is still not well supported in most PLM solution offerings; enabling both mechanical and process product development.

With this move, Dassault Systèmes expands its addressable market by acquiring a strong company with a proven process PLM offering. Of course, there is still the matter of integration, building a strong joint go to market plan, and other acquisition and execution issues, but those should be manageable. CIMdata saw good growth in cPDM in 2010 and, if Dassault Systèmes' Q1 results are indicative of the market in 2011, having a broader cPDM platform to capture business in that growing sector of the PLM market will provide DS the opportunity to drive future growth.

About CIMdata

CIMdata, an independent worldwide firm, provides strategic management consulting to maximize an enterprise's ability to design and deliver innovative products and services through the application of Product Lifecycle Management (PLM). CIMdata provides world-class knowledge, expertise, and best-practice methods on PLM. CIMdata also offers research, subscription services, publications, and education through international conferences. Visit <http://www.CIMdata.com> for more information.

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Company News

Altair Engineering Receives Boeing Performance Excellence Award

5 May 2011

[Altair Engineering, Inc.](#) announced that it has received a 2010 Boeing Performance Excellence Award. The Boeing Company issues the award annually to recognize suppliers who have achieved superior performance.

Altair achieved a Silver composite performance rating for each month of the 12-month performance period, from Oct. 1, 2009, to Sept. 30, 2010.

Boeing is one of many aerospace customers for Altair. In 2010, Altair recorded a 25 percent year-over-year revenue growth in the global aerospace market. Altair's HyperWorks software offers the industry a broad suite of CAE solutions for minimum-weight design, stress analysis, and mechanism and vulnerability simulation for metallic and composite structures. Aerospace customers globally that have employed HyperWorks and its simulation-driven design processes, enabled by a strategic combination of Altair experience, technology and methods, have reported an average of 15 percent weight reduction for products while shortening the product design and development cycle by up to 50 percent.

For more information on the Boeing Performance Excellence Award, visit http://www.boeing.com/companyoffices/doingbiz/supplier_portal/bpea.html.

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CD-adapco Announces UAB Student As its 2011 Academic Paper Contest Winner

5 May 2011

CIMdata PLM Industry Summary

CD-adapco has announced that the University of Alabama at Birmingham's, David Cooper, is the winner of its 2011 Academic Paper Contest.

Students and researchers, who were enrolled in CD-adapco's Academic Program and had completed a CFD simulation project between 2009 and 2011, were invited to submit a paper describing their simulation work for that project. The author of the winning paper, David Cooper, was chosen by CD-adapco's panel of expert judges, and is receiving an all-expense paid trip to the STAR American Conference 2011. The trip includes flights and accommodations, and the opportunity to present his work to the gathered audience of distinguished industrial simulation experts.

David, a senior at the University of Alabama at Birmingham, took a CFD Basics (ME 421/521) class last semester and used STAR-CCM+ for the design of a micro-air vehicle for his Senior Design Project. The paper he submitted, entitled "Performance of a Proposed Micro-Aerial Vehicle Design," exhibited a very good application of a number of STAR-CCM+ techniques to an applied engineering design that would be difficult to test experimentally.

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Ciespace Corporation Names Sanjay Choudhry as Chief Technology Officer

2 May 2011

Ciespace Corporation, a privately held engineering software company, announced that it has appointed Dr. Sanjay Choudhry to the position of Chief Technology Officer (CTO) and Vice President of Engineering. Under Dr. Choudhry's leadership, Ciespace will focus its global research & development (R&D) activities to expand the company's product offerings and position its computer-aided engineering (CAE) solution at the forefront in key industries including automotive, aerospace and industrial segments of the engineering design and analysis marketplace.

"The engineering software industry is under significant pressure to improve the usability and automation of the tools used to perform engineering design and analysis," said Kevin Kerns, President and CEO. "Over the past ten years, the demands on engineering organizations to handle larger and more complex multi-physics problems has placed a severe strain on the tools and resources currently available in these organizations. As a result, there has been a significant shift in both how the tools are being used and the types of problems to be solved. We believe that organizations could realize significant benefits from their engineering analysis tools if they were easier to access, delivered greater automation and knowledge capture, and allowed users to share ideas more seamlessly. As CTO, Dr. Choudhry will lead our global R&D teams in developing and evangelizing tomorrow's leading edge CAE solution, putting Ciespace at the forefront of the CAE industry."

As Chief Technology Officer, Dr. Sanjay Choudhry will be responsible for the company's product strategy, development and delivery of an entirely new paradigm of CAE solutions. Dr. Choudhry, with 25 years of experience in the areas of computer-aided engineering and scientific computing, brings a long track record of success in developing and releasing industry leading products, based on cutting edge linear and non-linear technology across multidisciplinary fields.

Prior to joining Ciespace, Dr. Choudhry was the Vice President of Product and Release Management at MSC Software. In this role, he was responsible for the product strategy, technology roadmap, and commercial pricing for all MSC products. Previously, Dr. Choudhry held various executive positions at MSC and Marc Analysis Research Corporation in product development, management, and marketing. During his tenure at MSC and Marc, Dr. Choudhry was closely involved in the design and development

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of Marc, Nastran, and other commercial simulation products used worldwide. He has also published over 45 papers in international technical journals and conferences in a wide variety of simulation technology areas.

Dr. Choudhry has a Bachelors of Technology in Mechanical Engineering from the Indian Institute of Technology, a Masters of Science Degree and a Ph.D. in Computational Mechanics and Applied Mathematics from Ohio State University. He also received an MBA from University of California-Berkeley. After completing his Ph.D., Dr. Choudhry spent several years in the engineering group at Bridgestone/Firestone Corporation working on a number of their engineering design and analysis projects.

"After spending nearly 25 years of my career in the engineering design and analysis field, working on several of the world's leading CAE products, I believe that Ciespace is at the epicenter of one of the most significant paradigm shifts we have witnessed in the engineering analysis field," stated Dr. Choudhry. "I believe there are a number of critical factors at work, including new innovative research which can greatly simplify and automate the traditional finite element approach to engineering analysis, in combination with the emergence of new delivery systems and compelling economics that will drive market adoption of an entirely new generation of CAE solutions."

About Ciespace Corporation

Ciespace develops and markets advanced 3D digital modeling and analysis solutions for the aerospace, automotive, industrial, and electronics markets. The company, founded by Dr. Kenji Shimada, Professor of Mechanical Engineering at Carnegie Mellon University, is based on the patented BubbleMesh™ technology, a product of more than 18 years of advanced research in the field of 3D digital modeling. BubbleMesh™ enables the automated generation of high quality meshes for non-linear, multi-physics, and large-scale engineering analysis, which until now have been developed using costly manual labor. This automation dramatically increases the speed and quality of the engineering design process, for applications ranging from automobile crash simulation to complex fluid dynamic (CFD) and electromagnetic (EM) analysis.

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ICAM Signs Dealership Agreement with VCI China

28 April 2011

ICAM Technologies Corporation ([ICAM](#)) announced the signing of a Dealership Agreement with China-based Value Creation International Limited (VCI) to provide local Chinese customers, running primarily CATIA, with advanced ICAM NC post-processors, machining simulation and technical support services.

VCI was chosen by ICAM, because of its NC manufacturing experience particularly within the CATIA V5 CAD / CAM market and its expert knowledge of ICAM's complete product catalogue.

VCI Technology will offer ICAM's complete Integrated Post-Processing, Simulation & Emulation (Integrated PSE) solution inside CATIA to the Chinese aerospace and aeronautics industry. VCI will also be serving customers using other popular CAM Systems as well.

ICAM develops and delivers manufacturing software and services specializing in NC post-processing solutions that support the most popular CAD / CAM systems, machine tools and controllers for the most successful manufacturers around the world.

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ICAM's product suite includes CAM-POST® for NC post-processor development with the option for integrated machine tool simulation using Virtual Machine®. ICAM also supports machine code data verification driven with Control Emulator™ inside Virtual Machine or CATIA / DELMIA V5.

About Value Creation International Limited

For over 8 years Value Creation International Limited has been specializing in the development and implementation of PLM solutions for manufacturers in major industries in China. To further strengthen its position in the marketplace, VCI has introduced VCI-CODE & RM (Coding and resources management), VCI-DMC (Digital model quality check) and VCI-PLM (product lifecycle management). VCI is a Dassault Systemes value added reseller and provides professional consulting PLM services and develop in-house program based on unique customer requirements.

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Knovel Adds Four Publishing Partners in Q1

2 May 2011

[Knovel](#) has expanded its partner ecosystem with the addition of four publishers in the first quarter of 2011. Knovel partners with more than 75 societies and publishers worldwide to ensure engineers have access to trusted sources of technical content across 25 engineering subject areas. Last year, Knovel added 10 partners and expanded its content offering nearly 20 percent.

Recently added partners include:

- United States Pharmacopeia (USP) - a non-governmental, public standards-setting authority for prescription and over-the-counter medicines and other healthcare products manufactured or sold in the United States. Knovel has licensed the Food Chemicals Codex (FCC) which will be added to the Food Science subject area. The FCC is a compendium of internationally recognized monograph standards and tests for the purity and quality of food ingredients.
- Organisation for Economic Co-operation and Development (OECD) - an international economic organization founded in 1961 to stimulate economic progress and world trade. Knovel has licensed "OECD Guidelines for the Testing of Chemicals" and "Good Laboratory Practice -- OECD Principles and Guidance for Compliance Monitoring" which is used to identify and characterize potential hazards of new and existing chemical substances, chemical preparations and chemical mixtures. These titles will expand Knovel's Chemistry and Chemical Engineering subject area.
- International Council on Mining and Metals (ICMM) - established in 2001 to act as a catalyst for performance improvement in the mining and metals industry. Knovel has licensed seven titles from ICMM covering human rights, working with indigenous peoples and biodiversity. The titles will be part of a new subject area, Mining Engineering and Extractive Metallurgy, to be launched in May 2011.
- The Society for Mining, Metallurgy and Exploration (SME) - an international society of professionals in the minerals industry with more than 12,000 members in nearly 100 countries. Knovel has exclusively licensed 36 titles from SME which will be part of a new subject area, Mining Engineering and Extractive Metallurgy, to be launched in May 2011.

For more information about Knovel and partnership opportunities, please visit:

<http://why.knovel.com/solution/content.html>

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MecSoft Corporation Welcomes VAR in Russia

5 May 2011

[MecSoft Corporation](#) announced a VAR partnership with Softline Company, with headquarters in Moscow, Russia.

Founded in 1993, Softline today has 65 offices throughout Russia, Commonwealth of Independent States (CIS), Mongolia and countries of Far Abroad: Turkey, Venezuela, Vietnam, Egypt, Romania, Argentina, Colombia. Softline is a value added reseller for a number of globally recognized products: Autodesk, PTC, Alibre, Geomagic and IMSI.

“VisualMILL and RhinoCAM offer our CAD and 3D scanning customers an extremely powerful manufacturing solution that is easy to use,” stated Kirill Grachev, Head of Marketing Department. “We look forward to introducing and growing MecSoft products in Russia and CIS.”

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Mensch und Maschine Software SE / Open Mind Technologies AG: Mourning the Loss of Werner Schwenkert

11 February 2011

- Founder of MuM subsidiary Open Mind Technologies AG passes away
- Volker Nesenhöner and Dr. Josef Koch will continue to lead Open Mind

Open Mind and MuM mourn the passing of Werner Schwenkert, who passed away shortly before his 63rd birthday, leaving behind a rich professional legacy.

Werner Schwenkert was the founder of Open Mind Technologies AG (OM) and brought the company into the MuM Group in 2002 by way of an exchange of shares. Since then, OM has been the nucleus of the MuM software segment and has assumed a leading position in the CAM market with a turnover of more than EUR 20 million.

CAM stands for computer-aided manufacturing, meaning manufacturing software that controls precision machine tools for milling and turning complex components and moulds.

“We believe it is incumbent upon us to honour Werner Schwenkert’s life work by moving forward as he would have done,” says MuM CEO Adi Drotleff. “Fortunately, he left behind a well-ordered company, with outstanding products, a solid customer base, highly motivated employees and a very experienced management team that can seamlessly lead the company forward.”

Dipl.-Ing. Volker Nesenhöner is the new CEO of Open Mind AG and will continue to be responsible for worldwide sales. Open Mind co-founder Dr. Josef Koch, who has directed software development right from the beginning of the company and may be regarded as the father of OM technology, has been appointed as Executive Director of Technology. Markus Pech, who represents the “bridge” between OM and the MuM Group, will continue on as CFO. The directors will be supported by Hagen Rühlich (Technical Director), Ines Kaminzky (Marketing), Susanne Weimar (Finances/Admin) and Silvia Wioska (Operations/HR).

Volker Nesenhöner: “All of the members of my management team can look back on several years of employment at Open Mind AG, and they have occupied their current management positions for at least five years. This enables us to guarantee our customers one hundred percent continuity after the tragic

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passing of our founder.”

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MphasiS, an HP Company, Partners with Siemens PLM Software to Provide Systems Integration for PLM Solutions to Mid-Market Organizations

3 May 2011

[MphasiS](#), an HP Company and leading IT services provider, announced that it will partner with [Siemens PLM Software](#) to provide systems integration services for PLM solutions to mid-market organizations. Under the terms of this relationship, MphasiS will provide solution integration capabilities for Siemens PLM Software’s [Teamcenter®](#). Clients, such as Nuvera Fuel Cells, Inc. (Nuvera), a global leader in the development of fuel cell systems and fuel processors for both end users and OEMs, will benefit from the access to an integrated PLM solution comprising Siemens PLM Software’s products, MphasiS’ systems integration expertise and strength in manufacturing industry knowledge, and HP’s hardware platforms.

MphasiS has a strong team of experts in the PLM industry, with over 300 internal resources dedicated to providing innovative PLM solutions to the marketplace. Additionally, this relationship between Siemens PLM Software and MphasiS will ensure greater market coverage in the Mid-Market segment where adoption of packaged PLM is growing. MphasiS’ offshore delivery model, use of existing tools and frameworks will help mitigate risk for the customers and help reduce the overall cost of ownership.

“This is an important partnership for MphasiS and we’re excited to leverage our PLM expertise through our work with Siemens PLM Software,” said Rajesh Makhija, Senior Vice President for Enterprise Market Unit at MphasiS. “Siemens PLM Software’s technology provides users with flexibility and scalability ranging from a single application to a customized suite, and our integration capabilities enable us to support these various platforms. Our homogeneous solutions which integrate hardware, software, services and support will greatly benefit our clients.”

“We are optimistic about extending our relationship with HP by partnering with MphasiS,” said Daniel Flick, Global Alliance Director, Siemens PLM Software. “Working with MphasiS enhances our ability to streamline implementation processes for mid-market companies and help them foster innovation and turn more ideas into successful products.”

With this new PLM Go-to-Market approach, MphasiS has been successful in gaining significant traction in the Mid-market segment. One of MphasiS’ recent PLM wins in the Mid-market space is Nuvera, a Billerica, Mass., U.S. based company that provides clean, safe, and efficient products for industrial vehicles and equipment in addition to furthering the development of power systems for automotive and transportation applications.

“As Nuvera continues to expand in the material handling market, we needed a more robust PLM solution that could run on our HP blade server infrastructure.” said Brian Landry, Senior Information Technology Manager for Nuvera Fuel Cells. “We have a great deal of confidence in our implementation of Teamcenter due to the software’s capability

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The New Global Product Development Approach Spurs Collaboration, Speeds Innovation

2 May 2011

CIMdata PLM Industry Summary

In the post-recession economy, successful product development efforts will increasingly be shaped—and driven—by advanced IT tools like product lifecycle management (PLM) and collaborative software that enables all stakeholders in a product’s design to share updates, reuse data and streamline processes. This was one of the key findings released today in a survey of more than 1,200 global enterprises, conducted by the Harvard Business Review Analytic Services, which sought to understand how companies are positioning themselves for revenue growth as the economy improves. The survey was sponsored by [Siemens PLM Software](#).

Against a backdrop of increasing global competition and tightly-controlled research and development (R&D) budgets, the firms were surveyed with regard to their plans for enhancing R&D efficiency, and the role that they expect IT to play in those plans. The 1,214 firms —representing numerous industry sectors, including manufacturing, professional services, and healthcare — were also surveyed about the role that partners and customers play in their product development processes, and the key challenges they face in implementing best-in-class IT support for their product design efforts.

Among the key survey findings:

- Since 2008, 55 percent of companies endeavored to increase R&D efficiency through such tactics as using IT to enhance collaboration.

- Half said increasing the rate of innovation is a top priority in 2011.

- Customer suggestions are the most important source of new product ideas.

- More than half of the companies said marketing, operations, sales and finance work with the R&D department.

- 55 percent said partners are an important source of ideas and innovation support.

- 43 percent said intellectual property protection is a challenge in working with external organizations.

The connection between effective IT use, innovation, and new-product outcomes was very clear across the survey sample. Only one out of five companies in the survey rated their executives’ evaluation of new product processes as “good.” However, among organizations whose IT departments encourage innovation and the deployment of new tools like PLM, almost half of the senior executives rate their product development processes in the “good” category. Conversely, businesses that do not use IT to monitor new product development — or are unhappy with the IT department’s support for it — were much more likely to report dissatisfaction with product innovation outcomes and a related impact on their overall revenues.

“The responses from this global panel reveals just how much IT is enabling a new, more efficient model for product design and development,” said Alex Clemente, managing director of Harvard Business Review Analytic Services. “Successful product development will increasingly be defined by using these IT tools like PLM in a smarter, more collaborative way — across geographies, across multiple partners, and across different disciplines.”

“Having a respected media organization like the [Harvard Business Review](#) conduct this in-depth research validates what we hear from our customers about the business impact and return on investment continually delivered by PLM solutions,” said Chuck Grindstaff, president and chief technology officer, Siemens PLM Software. “Businesses are focused more than ever before on fully marshaling the expertise, knowledge, creativity and ideas of its people and collaboratively applying them at every stage of a product’s lifecycle. Our increasing market leadership demonstrates that Siemens PLM Software’s

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technology is where businesses are turning in order to achieve their goals across their respective enterprises.”

According to the survey, the top five technology tools most typically used in enterprises with strong IT department support and R&D success are:

- Design and Analysis
- Supplier Management
- Product Requirements Management
- Strategic R&D Portfolio Management
- Change and Workflow Processes

In terms of future plans for integrating more sophisticated IT tools into the product planning process, strategic portfolio management was seen as an increasingly valuable component. More than two-thirds of the companies surveyed who use IT to monitor product development said that portfolio management will be important to them within two years. They cited not only the ability to build a smarter portfolio, but also the opportunity to create new processes that build cross-functional teams and link with external partners as key benefits of strategic portfolio management.

Finally, the survey also investigated the value placed on partners in the product development process. More than half of those companies surveyed indicated that partners are important in design considerations. By 2013, 86 percent of the firms also expect to have at least one product project underway based on a partners’ idea.

More detailed findings from survey can be found [here](#).

About Harvard Business Review Analytic Services

Harvard Business Review Analytic Services is an independent sponsored research unit within Harvard Business Review Group, which conducts research and comparative analysis into timely business and management ideas. HBR Analytic Services research has been presented in articles appearing in The New York Times, Economist.com, USA Today, and the Times of London, among other major media.

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Events News

Delcam’s Latest PartMaker to be Demonstrated at EASTEC

3 May 2011

Delcam’s PartMaker Division will demonstrate the latest version of PartMaker software for programming CNC mills, lathes, wire EDM, turn-mill centres and Swiss-type lathes on **booth 5326** at EASTEC. EASTEC is the largest machine tool show in the North-East USA to be held this year in West Springfield, Massachusetts from 17th to 19th May. Major highlights of PartMaker Version 2011 include more powerful milling functionality, more vivid set-up documentation, a more flexible tooling library, improved simulation of unique machine tool architectures and a host of additional productivity enhancements.

At EASTEC, PartMaker will be demonstrated alongside Delcam’s other manufacturing software

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products, including the PowerMILL, PowerSHAPE, FeatureCAM, ArtCAM and PowerINSPECT ranges. The Delcam booth will be the largest CAM booth at the exhibition, where the most comprehensive range of CAM products at the show will be on display.

The PowerSHAPE Companion for PartMaker is an optional module to allow users to design 3D models, repair poor quality 3D data and modify 3D geometry to improve “Design for Manufacturability”. This new module features the “Solid Doctor” utility, allowing users to read and repair models from all sources and tackle the common problems that can be found when translating low-precision and incomplete 3D data by detecting and repairing faults in engineering models and generating a valid, high-precision solid model ready for programming in PartMaker.

PartMaker 2011 lets users manage their tool inventory in a new, more universal manner through the use of “Master Tools Databases.” Master Tools Databases can be edited, manipulated and stored through external database programs like Microsoft Excel and individual tools can be imported for specific jobs. This new approach makes programming more productive because it allows users to quickly choose tools created previously faster than before.

Bar-fed mills are a new breed of machine tool technology that is growing more popular for the production of small, complex parts for such applications as medical devices, aerospace, fluid power and any other industry that requires small, complex parts. In many ways, these machines represent the future of complex, low volume, small parts manufacturing. With Version 2011, PartMaker aims to establish itself as the market leading system for automating the programming of bar-fed mills by introducing a number of new features for handling the unique programming issues presented by these machines. PartMaker Version 2011 simulates the unique architectures and machine kinematics of bar-fed mills in its 3D simulation module and supports the bar-fed mill offerings with post processors and vivid simulation of such machines from leading builders like Willemin-Macodel, Bumotec, Chiron, Mazak, Star and others.

PartMaker 2011 features a host of improvements to the PartMaker Documentation Wizard module including a number of new standard set-up sheet templates as well as the ability to automatically create “mid process” set-up sheets. “Mid process” set-up sheets display a picture of the part being machined at each step in the machining process as well as a graphical view of the tool used in that process. Such set-up sheets can be a great way to communicate to shop floor personnel exactly how a part should be processed, and can thus speed-up setup time and reduce the possibility of errors.

PartMaker Version 2011 includes a number of enhancements to the software’s surface machining strategies. These improvements include the addition of a more powerful Surface-Swarfing strategy which makes programming of swarf machining easier and more accurate. The new version also includes the addition of 4-axis swarf machining, which allows more sophisticated milling on machines only capable of 4-axis cutting. This includes most Swiss-type lathes on the market today.

3D simulation in PartMaker 2011 is much faster than previous versions; more than 50% faster in many cases. This increase in speed is particularly helpful for the cutting simulation of complex parts with a number of features. The new version also lets users see and verify all their tool paths at once when programming on a solid model. By simply clicking on a hole or profile on a solid model, PartMaker will place the user into the profile or hole group where that feature has been defined.

In addition to the improvements mentioned above, PartMaker 2011 includes a host of other productivity enhancements including increased input precision, user-defined fonts for engraving, more powerful and flexible turning and 2D milling tool paths, simulation of pinch milling, improved geometry import

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functions including support of SolidWorks 2011, DWG import and a free STEP translator, and many enhancements to make the PowerMILL Interface faster and more efficient, plus new and improved context sensitive help and much, much more.

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Delcam's Bulgarian Sales Partner DiTra Holds Largest User Meeting

5 May 2011

Delcam's Sales Partner in Bulgaria, DiTra, held its most successful user meeting to date last month in Plovdiv, one of the country's main industrial regions. Three years ago, there were only twelve attendees at the meeting; this year's event attracted more than 60 delegates. This total included ten delegates from Macedonia, where DiTra also represents Delcam.

This higher number reflected the increase in sales of Delcam's CAM software in the country as it continues to recover from the global downturn. Over the opening months of this year, Delcam's sales in Bulgaria have increased by more than 50% from the same period in 2010.

As with all Delcam user meetings, the Bulgarian event included demonstration of the latest versions of the Advanced Manufacturing programs, PowerSHAPE for product and tooling design, PowerMILL for high-speed and five-axis machining, FeatureCAM for feature-based programming, and PowerINSPECT for inspection. The Delcam for SolidWorks integrated CAM program also attracted considerable interest, although this was little surprise since DiTra is Bulgaria's leading reseller of SolidWorks.

The meeting also included presentations from Elprom Harmanli, a manufacturer of electric motors, on the company's use of FeatureCAM, and from DiTra's technical partners Bulmakmetal, Polymeta and ESD, respectively the Bulgarian representatives for Okuma, DMG and Heidenhein.

DiTra was founded in 1990 to improve its customer's performance through the implementation of leading engineering technology. It has been a Delcam Sales Partner since 2005. As well as supporting the CAD/CAM needs of Bulgaria's manufacturing companies, DiTra has supplied software to all of the country's technical universities.

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Delcam's New CAM Range on Show at AUSTECH

3 May 2011

Delcam's Australian reseller, Complex, will promote the company's complete range of CAM software and services at the AUSTECH exhibition to be held in Melbourne from 24th to 27th May. Programs on show will include the latest version of Delcam for SolidWorks, plus the 2011 releases of PowerMILL for high-speed and five-axis machining, FeatureCAM for feature-based programming, and PartMaker for Swiss-type lathes and turn-mill equipment.

Delcam has been ranked as the world's leading specialist supplier of NC software and services by US analysts [CIMdata](#) for the past ten years. It means that large companies can source all of their CAM requirements from a single supplier, while smaller organisations can be sure that they can obtain exactly the software they need, rather than having to accept a compromise solution.

Delcam for SolidWorks marked a new direction for Delcam. Previously, the company had supplied all

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of its machining software as stand-alone systems that could be linked to any CAD program. In contrast, Delcam for SolidWorks is fully integrated into the SolidWorks environment so that the program looks and behaves like SolidWorks. It offers full associativity so that any changes in the CAD model will be reflected automatically in the toolpaths.

The 2011 release includes comprehensive options for the programming of turning and mill-turn equipment, alongside Delcam's technology for drilling, and two- through five-axis milling. This expanded range of strategies will allow users to program everything from lathes up to mill-turn equipment, more quickly, more reliably and more easily than with other integrated CAM systems.

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

FeatureCAM 2011 incorporates support for 64-bit computers, improved data exchange from a wider range of design software, the ability to use stock models and new strategies across the complete program, from turning to five-axis machining. The new release also has a more modern interface to make programming easier than ever.

Major highlights of PartMaker 2011 include more powerful milling functionality, a more flexible tooling library, improved programming and simulation of bar-fed mills, more detailed mid-process documentation and a host of additional productivity enhancements. In particular, multi-axis milling functionality that has taken Delcam many man-years to develop continues to be added to PartMaker at a rapid pace.

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Delcam to Announce AICON PowerINSPECT Agreement at Control

3 May 2011

Delcam will formally announce an agreement with AICON 3D Systems GmbH, the developer of the MoveInspect HR optical measuring system, at the Control exhibition to be held in Stuttgart from 3rd to 6th May. Under the agreement, AICON will supply Delcam's PowerINSPECT inspection software with its metrology system. The new combination of hardware and software will be demonstrated at Control by both AICON (**stand 5206**) and Delcam (**stand 3514**).

AICON is one of the world's leading providers of optical camera-based 3D-measurement systems. The company, which was founded in 1990 by Dr.-Ing. Carl-Thomas Schneider and Dr.-Ing. Werner Bösemann, was a spin-off of the Braunschweig Technical University and the VW Group's R&D unit. Today, it has 60 employees and a customer base that includes renowned automotive manufacturers and suppliers, plus companies from the aerospace, shipbuilding and renewable-energy industries.

MoveInspect HR is a portable coordinate-measurement machine, consisting of high-resolution digital cameras and the hand-operated MI.Probe. Data are collected by sampling defined measuring points with the probe. MoveInspect HR allows for total freedom of movement around the object being measured as the only requirement is a line of sight between the probe and the camera system. As a result, the system can be used for a wide variety of applications, from the geometric inspection of small components to the measurement of wind-turbine rotor blades.

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The ability to use PowerINSPECT with MoveInspect HR offers many advantages. Firstly, before starting to collect any data, an inspection plan can be created in the Delcam software that details the measurements to be taken. Once this has been done, even inexperienced users will be guided smoothly through the measurement process.

During data collection, the MI.Probe acts as a central control unit. By pressing different buttons on the probe, the measuring process can be started, measurements taken or deleted, and the completion of the project signalled to the software. Each measurement is displayed by the software immediately, allowing extra measurements to be taken in any areas of concern.

Once the data collection is completed, various analyses can be run in PowerINSPECT to compare the results with part models from all major CAD formats. PowerINSPECT is able to manage alignment and positioning tasks as well. The software creates user-defined test reports, including graphical presentations of the results and highlighted deviations, that are easy to understand by all engineers, not just metrology specialists.

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Geometric to Showcase Reduction in Programming and Machining Time with CAMWorks® 2011 at EASTEC 2011

3 May 2011

Geometric (<http://www.geometricglobal.com>) announced that it will showcase its fully automatic CNC programming system CAMWorks® 2011 (<http://www.camworks.com>), at **Booth #5458**, at EASTEC 2011, from 17 to 19 May, 2011 in West Springfield, MA, USA.

CAMWorks 2011 automates the CNC programming process, reduces programming time by as much as 90 percent, and allows design and manufacturing engineers to use a single common database for both product design and final machining.

Fast and intelligent roughing

CAMWorks 2011 introduces VoluMill®, the ultra-highperformance toolpath generator for 2.5 axis and 3 axis high speed rough milling. VoluMill can reduce cycle times by more than 80 percent, thereby increasing production by up to 500 percent. In addition, VoluMill® allows you to establish and maintain ideal cutting conditions. As a result, cutting tool life is extended and tooling costs can be reduced by over 80 percent. VoluMill also helps avoid costly collisions and greatly extends the life of machine tools.

At the heart of CAMWorks 2011 is the Automatic Feature Recognition (AFR) software, making it the ideal CAM system for programming components. Using AFR, CAMWorks identifies the areas to be machined, and then uses its proprietary Technology Database (TechDB™) to generate toolpaths automatically. The result is fully automatic programming of families of parts, automatic programming of similar features on new parts, and the ability to incorporate manufacturing information directly into the solid model.

Something good gets even better

CAMWorks® 2011 has been upgraded to find more features, while reducing computation times by more than 50 percent. As part models become increasingly complex, recognizing more features in less time represents huge time savings. The Technology Database (TechDB™), that is used to store and apply

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knowledge based machining information, has been enhanced to simplify the process of creating best machining practices. These features make CAMWorks' knowledge-based machining capabilities easier to use, and improves the consistency and quality of the programmed parts. In addition, CAMWorks associativity accelerates new product development by automatically updating manufacturing models with design changes.

For the mold and die industry, Geometric has introduced ElectrodeWorks™, an optional electrode design solution that automates the entire process of calculation and design of EDM electrodes including design, management, documentation, and manufacturing. It is seamlessly integrated with SolidWorks/CAMWorks Solids assuring complete parametric association of data.

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PlanetPTC Live 2011 to Offer Attendees First Look at New Solutions for Optimizing Product Development Processes

3 May 2011

PTC announced that attendees will get a first look at key solutions for optimizing their product development processes at [PlanetPTC Live 2011](#), June 12-15, 2011 in Las Vegas, Nevada.

Building on the 20-year heritage of PTC/USER, this year's PlanetPTC Live user group event offers learning and networking opportunities for product engineers, developers, managers and educators who use PTC solutions to drive the design for tomorrow's break-through products.

PlanetPTC Live 2011 includes more than 100 informative sessions addressing issues ranging from leveraging PLM beyond engineering to environmental performance to the future of CAD. The event will also offer attendees a first-hand look at the new [Creo™](#) 1.0 apps, [Windchill®](#) 10.0 and the latest additions to PTC's other product lines as well.

PTC president and CEO James Heppelmann will deliver a keynote address and will participate in a panel discussion with executives from Raytheon, Caterpillar and ITron focused on the product development challenges brought on by product complexity and globalization. Brian Shepherd, PTC executive vice president for product development, will also deliver a keynote address in which he will outline the company's technology vision and product strategy.

In addition, Ian Ludgate, chief designer at Aston Martin Racing will get the crowd going with a keynote fresh from the most famous endurance race in the world – the 24 Hours of Le Mans. Ludgate will share with the audience the development story behind Aston Martin Racing's 2011 AMR-One race car.

PlanetPTC Live's content-rich, four-day agenda is highlighted by customer case studies, hands-on learning opportunities, roadmap sessions and PTC University training sessions. A complete agenda is available [online](#). Registration is [now open](#).

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Product Design + Innovation: New London Conference Warmly Welcomed by Industrial Design Community

31 March 2011

PDD, Lucid Group and Cambridge Design Partnership are among the growing number of design

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consultancies sending delegates to the [Product Design + Innovation Conference](#) in London this May 18-19. The two-day event, supported by British Design Innovation and the Institution of Engineering Designers, has also captured the interest of brands such as Sony, Pegler, Hasbro and Novo Nordisk who have already booked places for their in-house design teams. Meanwhile organisers have announced sponsorship deals with four global companies providing key services to product designers: Objet, Dupont, IP Research and solidThinking.

Attracted by the high profile speaker line up which features innovation leaders at Unilever, Electrolux, Seymourpowell, Cisco IBSG, Tangerine and British Airways, the positive industry response has demonstrated there is a real need for this unique learning and networking event.

Eric Bredin, Objet's marketing manager Europe, comments: "Good design is about so much more than aesthetics. It's critical for today's product designers to gain a swift return on investment through effective design – which can be the result of good use of technology, materials, process and strategy. The organisers of Product Design + Innovation have put together an excellent conference programme with an impressive array of speakers. It's a great forum to gain insight, or remind yourself of best practice from some real success stories."

DuPont will be sharing its knowledge of polymer-based solutions that can resolve the paradox in design – how materials available today can meet the combination of needs of strength, beauty and sustainability. Veronique Ruppert-Schmitt, DuPont's European marketing communications manager said, "Product Design + Innovation reflects our desire to engage more proactively with designers, engineers and specifiers. They are our genuine partners for innovation, with whom we can develop tomorrow's solutions in plastics and bioplastics for consumer, industrial and automotive products."

Nicos Raftis, director of IP Research (IPR) believes that the real needs of industrial designers have not been properly addressed at a UK event until now: "Other conferences on innovation or product development frequently end up being a mosaic of very different issues. Designers care about how they can create new concepts, how they can find inspiration, how they can leverage and build on previous ideas, and what enabling technologies to adopt. They need to know how things have been evolving, and what opportunities are there for new creation. For IPR this is a perfect match because as a company we are focused on serving the needs of the design community as opposed to the needs of patent attorneys."

solidThinking, which develops 3D design software, has also signed up as a sponsor for the event. Vice president of product strategy & marketing, Alessandro Mazzardo, said: "At last I have found an event which is truly targeted at the industrial design community. High profile and well respected speakers make this a great learning and networking opportunity, enabling us to showcase our latest technology advancements to the right audience. I hope there will be more events like this in other countries."

Product Design + Innovation takes place on 18 and 19 May at ExCel London. For the full programme and booking information, see the official website <http://www.pdesigni.com> which includes product design news and blogs as well as speaker biographies.

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ProSTEP iViP Symposium 2011; The Network Promotes Open Systems and Supports Outstanding Scientists

20 April 2011

Ulrich Ahle, with Siemens IT Solutions and Services and Member of the ProSTEP iViP Board of

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Management, was able to welcome over 450 participants from 13 nations at the 14th ProSTEP iViP Symposium 2011. With this number the event – which was sponsored by the BMW Group and CONTACT Software – matched the record results of 2008. Neither participants nor speakers shied away from hot-button issues, addressing for example the question of openness for PLM-Software. Also, the ProSTEP iViP Scientific Award was introduced at the symposium for the first time.

22 IT and service providers, and therewith 15 percent more than last year, used the accompanying exhibition for presenting their range of services. For two days 40 lectures were on the agenda at the BMW World in Munich, to be selected from three parallel sessions. Two topics became the central theme of the entire event: the complexity of the products and of the processes of their creation has apparently reached a peak level, making the search for simple and continuously usable solutions capable to be integrated as urgent as never before. Implementing the necessary openness of the systems applied is now becoming a matter of concrete steps.

Karl Erich Probst, Senior Vice President and CIO at the host BMW, held the opening speech of the Symposium concluding with a piece of information grabbing everybody's attention. He announced the formation of a ProSTEP iViP project group, which will be working on the definition of a „Codex of PLM Openness“. The goal will be the manufacturers of standard software committing to a codex, giving high priority to real openness, interoperability and flexibility when it comes to system selection.

Karl-Heinz Zachries, founder and General Manager of CONTACT Software in Bremen, added in his keynote another piece of news pertaining to the same issue: due to an antitrust law appeal by CONTACT in Brussels, the EU commission became active and is now questioning users and hearing some providers to follow up on the accusation, that there might be attempts with unfair means to shield proprietary systems in such a way, that their data cannot be used and managed effectively by external systems. With the recently introduced concept of workspaces CONTACT itself has presented an approach that „allows for the chaos of creative product development in heterogeneous environments and manages the results effectively“, as stated by Karl-Heinz Zachries. A software module independent from the own PDM solution ensures in the background that the data is synchronized with the project. Agile, Teamcenter or SAP can be embedded into the synchronization.

Being open – for Prof. Dieter Spath, Director of the Fraunhofer IAO and Vice President of the German National Academy of Science and Engineering acatech, these words mean much more than just open systems: „If we want to continue playing an important role in the global market, we have to think out of the box. We need radical innovation with respect to products as well as business models! With everything we do“, says Prof. Dieter Spath, „we have to take along the people, which means continuing education just-in-time, not with a huge delay as was the case with using the Internet.“

Therewith the bridge was built to go into more detail under this year's motto „Agile Collaboration & Managing Complexity“. The Scientific Track – successfully introduced last year – continued on the second day with five lecture blocks. The scientific part included in addition for the first time a BMBF block, presenting the final results of two successful projects sponsored by the German Federal Ministry of Education and Research (BMBF): ADiFa, a project that developed a user protocol for process harmonization in the Digital Factory, working closely with the ProSTEP iViP project „Digital Manufacturing“ (cf. PDJ 02/2010); and ISYPROM, providing solutions for model-based process and system design for the acceleration of innovation.

The Scientific Track started with a presentation by Dr. Florian Gerhardt, who is with BMW today and was the winner of the ProSTEP iViP Scientific Award granted for the first time during the evening event in the restaurant 'Augustiner Keller'. This year the prize was offered inside the ProSTEP iViP

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Association for scientists of Member Group 3. As of next year the call for papers will be posted internationally. This way, the Association wants to support young scientists in the area of virtual product creation. Diploma or master theses will be endowed with 1.000 Euros, dissertations with 4.000 Euros. Anne Brinkmann received the prize for the master thesis, which she completed at the Karlsruhe Institute for Technology. Anne Brinkmann, who is now with Audi, says: “Especially in the area of Engineering, which is increasingly lacking experts, such an encouragement is very important.”

A glimpse into the future of IT application in the engineering of aircraft construction at Airbus permitted the closing keynote of the symposium. “80 percent of the IT environment is unnecessary” was the assessment made by the head of development Anders Romare, who – based on longtime experiences at Volvo - set himself the target to standardize within the next years to one single PLM platform. He closed the circle to the opening speeches by stating: “We will avoid proprietary solutions and formats and build upon openness and standards, where we can.”

The 15th ProSTEP iViP Symposium is scheduled for the second week of May 2012 and will be sponsored by Airbus and PTC.

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SAPPHIRE® NOW Connects to SAP® World Tour Events in Four European Cities

5 May 2011

[SAP AG](#) will host its annual conference, [SAPPHIRE® NOW](#), in Orlando, Florida, from May 15 - 18, 2011. Building on a record 2010 attendance of 50,000 customers, partners and employees on-site and online, SAP will connect this year’s conference to four regional events in Europe. Delegates to [SAP® World Tour](#) stops in [London](#); [Moscow](#); [Brussels, Belgium](#); and [Lausanne, Switzerland](#), will have the opportunity to meet with SAP executives from regional leadership teams and local customers and partners to discuss the product and technology updates being presented at the event. Attendance at the four events, which take place on May 18 (May 17 - 18 in Lausanne), is expected to exceed 3,000.

The SAP World Tour 2011 takes place in more than 50 cities in over 40 countries in Europe, Asia, Latin America and North America. The global road show has reached more than 240,000 customers, partners and influencers over the last seven years and is designed to enable dialog with influencers, customers and prospects.

For more information, including coverage leading up to and during the events, visit the [SAPPHIRE NOW newsroom](#). Follow SAP on Twitter at [@sapnews](#) and SAP World Tour at [@sapworldtour](#).

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solidThinking Will Offer Hands-On Demonstrations of Its Latest Software at the ProductDesign + Innovation Conference May 18-19 in London

3 May 2011

solidThinking, Inc. (<http://www.solidthinking.com>) announced that designers will have an opportunity to participate in hands-on demonstrations of the recently released solidThinking 8.5 and solidThinking 8.5 *Inspired™* software at the [ProductDesign + Innovation Conference](#) in London, May 18-19. solidThinking is a major sponsor of the event, where senior product design and innovation professionals

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from leading brands, OEMs and consultancies will share ideas and explore emerging sources for growth.

As a silver sponsor of the conference at ExCeL London, the international exhibition and convention center on London's waterfront, solidThinking will welcome members of the industrial design community to its exhibit. Designers, concept engineers and architects will be able to view and try out the new features of solidThinking 8.5 and [solidThinking 8.5 Inspired™](#) with its morphogenesis™ capabilities. The software's better functions include expanded approaches to modeling, data exchange and CAD collaboration, rendering, presentation and form generation.

Joining solidThinking at the conference will be its [recently appointed distributor](#) for the U.K., Cadsoft Solutions Limited (<http://www.cadsoftsolutions.co.uk>). Located in Cambridge, Cadsoft Solutions provides 2D and 3D CAD and design software solutions that enable innovative product development and design.

ProductDesign + Innovation is organized by Crain Communications and is supported by British Design Innovation, (BDI) Verband Deutscher Industrie Designer (VDID) and the Institution of Engineering Designers. Major global brands, including Sony, Pegler, Hasbro and Novo Nordisk, will participate in the conference, which will feature speakers from such companies as Jaguar Land Rover, Unilever, Electrolux, Philips Design, Seymourpowell, Cisco Internet Business Solutions Group, Tangerine and British Airways. Joining solidThinking as event sponsors are Objet Geometries Ltd., DuPont and IP Research Ltd.

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Si2 to Host “Synergies in IC Design: PDKs and DFM Standards Working Together” Co-Located Event at DAC 2011

4 May 2011

The Silicon Integration Initiative (Si2) announced the “Synergies in IC Design: PDKs and DFM Standards Working Together” co-located event being hosted at the Design Automation Conference (DAC) show to be held at the San Diego Convention Center, San Diego, CA, from June 5-9, 2011. The “Synergies in IC Design: PDKs and DFM Standards Working Together” event will be held on June 6, from 8:30 a.m. – 12:00 p.m. in Room 29AB in the San Diego Convention Center. In consideration of today's economic conditions, Si2 is pleased to offer this co-located event free of charge. Attendees can register at the DAC website: <http://www2.dac.com/registration.aspx> under Co-Located Events.

The complexity of processes and rules needed to ensure the manufacturability of ICs is increasing rapidly with every new technology node. Many of the issues involving Process Design Kits (PDK's) and Design for Manufacturability (DFM) are interrelated and can be simplified, if not eliminated, by standardized industry practices. This workshop will highlight those interrelated standards and showcase the ongoing work being done by industry leaders in solving these problems.

PDKs are the fundamental building blocks for all electronic design. Standardized representation of PDK content and interfaces will offer operating efficiencies to foundries, EDA companies, IP providers and design companies who use the PDK's, create their own kits or need to modify those that they receive from their foundries. Resultant PDK's are expected to be more robust and portable than ever before.

In the DFM arena, standardization has proceeded along 2 parallel fronts. In physical DFM, a standard high-level DFM verification and optimization language called OpenDFM has been defined to support the needs of manufacturability and PDK generation. OpenDFM rules bridge the gap between a layout

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style that allows only a few, very restricted layout patterns and a style that allows purely arbitrary layouts. Second, there is ongoing effort to standardize a common format for representing parasitic information and to better handle manufacturing variability. This has implications in how this data is represented in PDK's and how they affect the modeling of design parameters for power, timing and SI analysis.

The event will include speakers from IBM, Texas Instruments, LSI, Mentor Graphics, STMicroelectronics, and Cadence. An abstract and link to the detailed agenda can be found here: http://www.dac.com/workshops+_colocated+events.aspx?event=47&topic=3

Other Si2-sponsored events at DAC include the "OpenAccess Scripting Language Workshop" on June 6, from 1 p.m.-4:30 p.m. and the Annual Si2 Open Reception on June 6, from 4:30 p.m.-6:00 p.m. Both of these events are also free of charge and open to all.

Links to more specific agendas and registration information can be found here: <http://www.si2.org/?page=11>

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SPRING Technologies at EASTEC this May 2011

4 May 2011

Trade Show: EASTEC, <http://www.easteconline.com>

Date: May 17 – May 19, 2011 at Eastern States Exposition West Springfield, MA

Where: BoothE-5415

Learn how to leverage machining simulation and verification software for developing, optimizing, and running programs for all types of CNC machines.

NCSIMUL benefits :

Eliminate manual prove-outs

Secure your machine environment and avoid crashes

Reduce your machining time and increase your tool life

Collaborate with 3D simulation movies and documentation

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10,000+ to Attend the Biggest-Ever EMC World, Where Cloud Meets Big Data

4 May 2011

News Summary:

- EMC to host 10,000+ attendees at the 11th annual EMC® World Conference in Las Vegas, with a focus on helping organizations take advantage of the major trends transforming IT.

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- The key theme, "Cloud Meets Big Data," highlights how two of today's most significant IT trends converge, providing significant new business value to IT professionals accelerating their journey to the cloud.
- Comprehensive event includes keynotes from industry leaders, more than 500 breakout sessions, more than 100 hands-on labs and exhibits from 100 of the leading IT vendors.
- EMC will also host the world's first Data Scientist Summit at EMC World, bringing together data scientists to discuss the big opportunities Big Data represents.
- EMC World is also home to Momentum 2011, the industry's largest gathering of enterprise content management experts, as well as the inaugural CIO Summit and Big Data Storage Summit.

Full Story:

EMC Corporation will host its 11th annual [EMC World](#) conference for more than 10,000 customers, partners, technologists, press, bloggers and analysts from around the globe from May 9-12 at The Venetian in Las Vegas. This year's theme, "Cloud Meets Big Data," highlights how two of the most significant technology trends today provide IT professionals with the opportunity to not only transform IT, but also transform their business. On Cloud computing, the focus is on accelerating the journey – leveraging service provider and hybrid technologies along the way. On Big Data, the focus is managing petabyte scale data volumes, extracting value from this data through analytics and ensuring that the information is delivered, in a timely fashion, to those who need it.

Highlights:

- Keynote presentations from top EMC and industry executives, including Joe Tucci, EMC Chairman and CEO; Paul Maritz, CEO of VMware; and Pat Gelsinger, EMC's President of Information Infrastructure Products, who will outline the EMC, VMware and industry views of the future enabled by cloud computing and Big Data. For a full list of keynotes visit: <http://www.emcworld.com/keynotes.htm>.
- More than 100 hands-on labs as well as 500 breakout sessions designed to help attendees realize more value out of their existing EMC infrastructure, accelerate their careers, be more successful in leveraging the advantages of the cloud and extract more business value from their Big Data. For a full list of breakout sessions visit: <https://www.emcworldonline.com/2011/scheduler/catalog/catalog.jsp>.
- The world's first Data Scientist Summit, bringing together nearly 500 data scientists and leaders from industry and academia to exchange ideas and explore their potential to change business and society in unprecedented ways through strategic insight into data. For full details visit: <http://www.datascientistsummit.com/>.
- Momentum, the largest gathering focused on enterprise content management and archiving where more than 600 attendees will learn how the cloud is transforming critical business processes at more than 100 educational sessions and demonstrations. For full details visit: <http://www.emcworld.com/momentum.htm>

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- An exclusive CIO Summit, hosted by Howard Elias, President and Chief Operating Officer, EMC Information Infrastructure and Cloud Services and Sanjay Mirchandani, EMC's Chief Information Officer and COO, Global Centers of Excellence. It will bring together corporate CIOs and senior executives as well as industry leaders, including Michael Capellas, Chairman and CEO of [VCE, the Virtual Computing Environment Company](#). Among several topics that will be covered are trust in the cloud and how Big Data will change the way customers create business value from information.
- The Big Data Storage Summit will present and explore new perspectives and challenge current theories on how to extract the most value from the world's data. Summit attendees will also learn how the industry can equip current and future data scientists with the tools, education and resources they need to succeed.
- The EMC World exhibit floor will also host an interactive demonstration of the [VEX Robotics Competition](#). EMC-sponsored VEX teams of middle and high school students, with guidance from teachers and mentors, have built innovative robots and will compete against other teams at the EMC World 2011 competition.

Follow EMC World Online

To track the latest EMC World 2011 happenings visit www.emc.com/emcworld2011

For continuous EMC World news and event updates, follow <http://twitter.com/emcworld> and <http://twitter.com/emccorp>.

Video replays of all EMC World keynotes and super sessions will be available to EMC's Facebook fans at facebook.com/emccorp shortly after the live presentation.

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Tribold Sets the Pace Again for Enterprise Product Management at Management World 2011

3 May 2011

At Management World in Dublin this month [Tribold](#) continues to lead the way for Enterprise Product Management (EPM) for Communication Service Providers. Throughout the show Tribold will be discussing the rapid adoption of Enterprise Product Management with Tribold executives and customers speaking in the conference program as well as demonstrating the capabilities of Tribold EPM on their booth.

Tribold and EPM in the conference agenda

Catherine Michel, Tribold's CTO, will be chairing a panel session entitled: Meeting the Needs of Larger Enterprise Customers - Tackling the cloud lining. This session investigates what strategies and infrastructures are used by successful cloud product/service providers to deliver new services.

Catherine will be joined by other panelists including: Andrew Sowden, Business Delivery Manager, Gen-i, Telecom Corporation of New Zealand; Eric Hudson, Director, Centurylink Strategy & Business Transformation; David Pecota, Director Industry Solutions, Microsoft Communications Sector, EMEA; and Susan McNeice, Vice President, Software Research, Yankee Group. The session takes place at

4.15pm to 5.45pm on Tuesday, May 25th.

Tribold EPM Version 5

At the show this year, Tribold will be announcing the latest release of their Tribold EPM software solution. Tribold EPM v5 will take the communications industry's most advanced Enterprise Product Management (EPM) software solution to the next level.

Focusing on the Product Experience which underpins the customer experience Tribold EPM v5 will be the only fifth generation EPM solution for CSPs. This release will include exciting new functionality developed in response to direct feedback from our customers across the globe on how they are using Tribold to manage their product portfolios.

Tribold EPM User Forum 2011

The 2011 Tribold EPM User Forum will be taking place this year in Dublin at the TM Forum Management World conference. The Forum is for users of Tribold EPM who want to share experiences and to get a view on the product roadmap. The session will be facilitated by Keith Willetts, CEO of TeleManagement Forum and representatives from CenturyLink, Internet Solutions (NTT Group), Sky and Telecom New Zealand are already confirmed for the Forum.

Tribold will be exhibiting at **booth 40** on the show floor and demonstrating the new Tribold EPM v5 release. To prearrange a meeting with Tribold please email marketing@tribold.com

TM Forum Management World 2011 takes place in The Conference Centre, Dublin between the 24th and 27th May 2011.

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Financial News

ANSYS Reports Strong Revenue and Earnings Growth for the First Quarter

5 May 2011

Management Increases 2011 Guidance

Highlights

- Revenue of \$158.0 million
- GAAP diluted earnings per share of \$0.45 and non-GAAP diluted earnings per share of \$0.57
- Record operating cash flows of \$84.9 million, a 42% increase over Q1 2010
- GAAP operating profit margin of 39.4% and non-GAAP operating profit margin of 49.9%

ANSYS, Inc. announced over-performance against its guidance in both revenue and diluted earnings per share for the first quarter of 2011. Total revenue increased by 16.2% over the first quarter of 2010. GAAP net income and diluted earnings per share increased 30.5% and 28.6%, respectively, over the first quarter of 2010, while non-GAAP net income and diluted earnings per share increased 23.1% and 21.3%, respectively. The growth in the first quarter was spread across all major geographic regions and among a broad array of industries.

"ANSYS' first quarter results are an excellent start to 2011 and represent early momentum from the

CIMdata PLM Industry Summary

focus and investments in 2010," commented Jim Cashman, ANSYS President and CEO. "During the first quarter of 2011, all major metrics of the business showed continued improvement, highlighted by revenues and earnings that were above our guidance, a record deferred revenue balance of \$236.4 million, and all time high cash flows from operations."

"We also saw improvement in the UK and North America markets over last quarter and, most notably, our Japan team delivered a very strong contribution to our first quarter results. We are extremely proud of their continued dedication and ongoing efforts in the face of such extraordinary circumstances. Supporting our Japanese employees and customers as they focus on rebuilding will be a new and important priority as we look into the remainder of 2011. Despite the various political turmoil and macroeconomic concerns, our diversified global reach, our resilient business model and our technological leadership continue to drive customer engagements. With the growing need for energy efficiency, stricter environmental and regulatory mandates, and ever-increasing consumer expectations, our customers are increasingly using simulation to enable innovation and value creation. These increasing business pressures, coupled with the dedication and efforts of our global team, have continued to enable us to deliver on our commitments," stated Mr. Cashman.

ANSYS' first quarter financial results are presented below. The non-GAAP results exclude the income statement effects of stock-based compensation and acquisition-related amortization of intangible assets. GAAP and non-GAAP results reflect:

- Total GAAP and non-GAAP revenue of \$158.0 million in the first quarter of 2011 as compared to total GAAP and non-GAAP revenue of \$136.1 million in the first quarter of 2010;
- A GAAP operating profit margin of 39.4% in the first quarter of 2011 as compared to 36.5% in the first quarter of 2010; a non-GAAP operating profit margin of 49.9% in the first quarter of 2011 as compared to 48.7% in the first quarter of 2010;
- GAAP net income of \$42.2 million in the first quarter of 2011 as compared to GAAP net income of \$32.4 million in the first quarter of 2010; non-GAAP net income of \$53.5 million in the first quarter of 2011 as compared to \$43.5 million in the first quarter of 2010; and
- GAAP diluted earnings per share of \$0.45 in the first quarter of 2011 as compared to GAAP diluted earnings per share of \$0.35 in the first quarter of 2010; non-GAAP diluted earnings per share of \$0.57 in the first quarter of 2011 as compared to \$0.47 in the first quarter of 2010.

The Company's GAAP results reflect stock-based compensation charges of approximately \$5.1 million (\$4.0 million after tax) or \$0.04 diluted earnings per share for the first quarter of 2011.

The non-GAAP financial results highlighted above, and the non-GAAP financial outlook for 2011 discussed below, represent non-GAAP financial measures. Reconciliations of these measures to the appropriate GAAP measures for the three months ended March 31, 2011 and 2010, and for the 2011 financial outlook, are included in the condensed financial information included in this release.

During the first quarter of 2011, the Company repurchased 247,443 shares of stock at an average price of \$51.34. The Company currently has approximately 1.1 million shares remaining in its authorized repurchase program.

Management's Remaining 2011 Financial Outlook

The Company has provided its 2011 revenue and earnings per share guidance below. The earnings per share guidance is provided on both a GAAP basis and a non-GAAP basis. Non-GAAP diluted earnings

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per share excludes charges for stock-based compensation and acquisition-related amortization of intangible assets.

Second Quarter and Fiscal Year 2011 Guidance

The Company currently expects the following for the quarter ending June 30, 2011:

- Revenue in the range of \$155 - \$161 million
- GAAP diluted earnings per share of \$0.41 - \$0.46
- Non-GAAP diluted earnings per share of \$0.54 - \$0.57

The Company currently expects the following for the fiscal year ending December 31, 2011:

- Revenue in the range of \$645 - \$665 million
- GAAP diluted earnings per share of \$1.81 - \$1.91
- Non-GAAP diluted earnings per share of \$2.30 - \$2.38

These statements are forward-looking and actual results may differ materially. Non-GAAP diluted earnings per share is a supplemental financial measure and should not be considered as a substitute for, or superior to, diluted earnings per share determined in accordance with GAAP.

Conference Call Information — Change in Format

ANSYS will hold a conference call at 10:30 a.m. Eastern Time on May 5, 2011 to discuss first quarter results. The Company is now providing its prepared remarks on the Company's Web site and as an exhibit in its Form 8-K in advance of the call to provide shareholders and analysts with additional time and detail for analyzing its results in preparation for the conference call. The prepared remarks will not be read on the call — only brief remarks will be made prior to the Q&A session.

The call will be recorded and a replay will be available approximately one hour after the call ends. The replay will be available for ten days by dialing 877-344-7529 (US), or 412-317-0088 (Canada and Int'l) and entering the passcode 450231. The archived webcast can be accessed, along with other financial information, on ANSYS' web site at <http://investors.ansys.com>.

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Aspen Technology Announces Financial Results for the Third Quarter Fiscal 2011

3 May 2011

Aspen Technology, Inc. announced financial results for its third quarter of fiscal 2011, ended March 31, 2011.

Mark Fusco, Chief Executive Officer of AspenTech, said, “The company continued to execute at a high level during the third quarter, delivering solid growth and strong cash flow. As AspenTech’s revenue model transition continues, we believe the company is well positioned to emerge with a combination of scale, growth, best-in-class margins, cash flow and a recurring revenue model.”

“The license portion of our total contract value grew by approximately 1.5% sequentially during the third quarter, leading to growth of approximately 7% for the first nine months of fiscal 2011 from the end of fiscal 2010. With one quarter remaining, we are already within our full year license growth guidance range, and we are optimistic about our outlook based on continued high customer interest levels entering our seasonally stronger fourth quarter.” Fusco added, “Free cash flow of approximately \$49 million for the first nine months of fiscal 2011 represents an increase of 128% year-over-year. We believe the company is on track to achieve our free cash flow guidance for fiscal 2011, as well as our

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goal of generating free cash flow in the mid-\$90 million range during fiscal 2013.”

Third Quarter Business Highlights

- Total contract value, including the value of bundled maintenance, grew approximately 2.4% sequentially during the third quarter, while the license portion of total contract value grew approximately 1.5% sequentially.
- Bookings were approximately \$79 million for the third quarter of fiscal 2011. Within bookings, new and expanded adoption drove the above mentioned sequential increase in the license portion of total contract value, and solid renewal activity contributed the remainder of total bookings.
- The value of future cash collections associated with the company’s subscription and multi-year term contracts was \$695 million at the end of the third quarter, an increase from \$688 million at the end of last quarter and \$537 million at the end of the third quarter of fiscal 2010.
- The company closed 16 bookings of over \$1 million during the third quarter, compared to 21 in the third quarter of fiscal 2010, and 47 bookings between \$250,000 and \$1 million, compared to 39 in the third quarter of fiscal 2010.
- Average deal size for bookings over \$100,000 was approximately \$609,000 in the third quarter, compared to approximately \$807,000 in the third quarter of fiscal 2010.

Summary of Third Quarter Financial Results

AspenTech’s total revenue of \$52.6 million increased 15% from \$45.6 million in the third quarter of the prior year.

- Subscription revenue includes all revenue associated with the company’s aspenONE subscription offering. Subscription revenue was \$17.2 million in the third quarter of fiscal 2011, an increase from \$4.0 million in the third quarter of fiscal 2010. Subscription revenue is recognized over the course of the multi-year agreement, and recognition begins when the first payment is due, which is typically 30 days after the contract is signed.
- Software revenue includes all non-subscription-based license revenue, including term-based contracts for point products as well as perpetual licenses. Software revenue was \$13.4 million in the third quarter of fiscal 2011, compared to \$14.7 million in the year ago period.
- Services & other revenue, which includes professional services, maintenance and other revenue, was \$21.9 million in the third quarter of fiscal 2011, compared to \$26.9 million in the year ago period.

For the quarter ended March 31, 2011, AspenTech reported a loss from operations of \$7.2 million due primarily to the multi-year revenue model transition following the introduction of the company’s aspenONE subscription offering, which has ratable revenue recognition, at the beginning of fiscal 2010. For the quarter ended March 31, 2010, the company reported a loss from operations of \$19.6 million.

Net loss was \$5.7 million for the quarter ended March 31, 2011, leading to net loss per basic and diluted share of \$0.06, compared to net loss per diluted share of \$0.24 in the same period last fiscal year.

Non-GAAP loss from operations, which adds back stock-based compensation expense and restructuring charges, was \$5.2 million for the third quarter of fiscal 2011, compared to a non-GAAP loss from operations of \$17.9 million in the same period last fiscal year. Non-GAAP net loss was \$3.8 million, or (\$0.04) per share, for the third quarter of fiscal 2011, compared to a non-GAAP net loss of \$20.1 million, or (\$0.22) per share, in the same period last fiscal year.

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AspenTech had a cash balance of \$151.0 million at March 31, 2011, an increase of \$19.4 million from the end of the prior quarter. The company generated \$31.7 million in cash flows from operations and invested \$1.7 million in capital expenditures, leading to free cash flow of \$30.0 million for the three months ended March 31, 2011. The company continued to reduce its secured borrowings balance, which was \$55.5 million at the end of the third quarter, down \$11.3 million compared to \$66.8 million at the end of the second quarter of fiscal 2011. During the quarter, the company used \$2.9 million in cash as it executed against the previously announced share repurchase programs.

Use of Non-GAAP Financial Measures

This press release contains “non-GAAP financial measures” under the rules of the U.S. Securities and Exchange Commission. Non-GAAP financial measures are not based on a comprehensive set of accounting rules or principles. This non-GAAP information supplements, and is not intended to represent a measure of performance in accordance with, disclosures required by generally accepted accounting principles, or GAAP. Non-GAAP financial measures should be considered in addition to, not as a substitute for or superior to, financial measures determined in accordance with GAAP. A reconciliation of GAAP to non-GAAP results is included in the financial tables included in this press release.

Management considers both GAAP and non-GAAP financial results in managing AspenTech’s business. As the result of adoption of new licensing models, management believes that, for the next few years, a number of AspenTech’s performance indicators based on GAAP, including revenue, gross profit, operating income (loss) and net income (loss), will be of limited value in assessing AspenTech’s performance, growth and financial condition. Accordingly, management instead is focusing on certain non-GAAP and other business metrics, including the non-GAAP metrics set forth in this press release, to track AspenTech’s business performance. None of these non-GAAP metrics should be considered as an alternative to any measure of financial performance calculated in accordance with GAAP.

Conference Call and Webcast

AspenTech will host a conference call and webcast today, May 3, 2011, at 4:30 p.m. (Eastern Time), to discuss the company's financial results for the third quarter fiscal year 2011 as well as the company’s business outlook. A replay of the call will be archived on AspenTech’s [website](#) and will also be available via telephone at (800) 642-1687 or (706) 645-9291, conference ID code 58336688 through May 10, 2011.

Click [HERE](#) for an unabridged press release with financial tables.

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Autodesk Extends Invitation to Join its First Quarter Fiscal 2012 Financial Results Conference Call Thursday, May 19, 2:00 p.m. Pacific Time

2 May 2011

What:

Autodesk, Inc. announced that it will broadcast its first quarter fiscal 2012 financial results conference call live via its website Thursday, May 19, 2011, at 2:00 p.m. Pacific Time.

How:

Autodesk will host a live webcast call at <http://www.autodesk.com/investors>. An audio replay webcast

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and podcast will also be available after 4:00 p.m. Pacific Time on our website at <http://www.autodesk.com/investors>

Contact: For more information, please call Autodesk Investor Relations at 415-507-6705.

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Magma Schedules Fourth Quarter Earnings Call and Webcast for May 26, 2011

5 May 2011

What:

Magma® Design Automation Inc. will conduct a live webcast and conference call to review financial results for its fourth quarter and fiscal year ended May 1, 2011.

When:

The webcast and conference call will be Thursday, May 26, 2011, at 2 p.m. PDT. Magma will release fourth-quarter financial results after Nasdaq trading closes on May 26, 2011.

Who:

Rajeev Madhavan, chief executive officer; Roy E. Jewell, president and chief operating officer; and Peter S. Teshima, chief financial officer, will host the call.

Webcast:

The live webcast will be available online at <http://investor.magma-da.com/events.cfm>. A replay of the webcast will be available on Magma's website through June 2, 2011.

Phone: Listen to the live call by telephone at the numbers below:

U.S. & Canada: (877) 303-3205

Elsewhere: (678) 894-3026

A telephone replay will be available beginning at 5 p.m. PDT on May 26, 2011 until 11:59 p.m. PDT on June 2, 2011 at the numbers below:

U.S. & Canada: (800) 642-1687, code #64794381

Elsewhere: (706) 645-9291, code #64794381

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Mentor Graphics Reports Preliminary Fiscal First Quarter Results

5 May 2011

[Mentor Graphics Corporation](#) reported preliminary results for its fiscal first quarter ended April 30, 2011. The company announced that it expects fiscal first quarter results to exceed prior revenues guidance with revenues of about \$230 million, up over 25% from the prior fiscal first quarter ended April 30, 2010.

.Non-GAAP earnings are expected to be in the range of \$.18 to \$.20 per share. The company expects a GAAP loss in the range of \$.02 to \$.06 per share driven primarily by non-cash charges associated with the retirement of the company's previous convertible debt. For the prior fiscal year first quarter the

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company reported revenues of \$180.6 million, a non-GAAP loss per share of \$.02 and a GAAP loss per share of \$.22. Bookings in the quarter grew about 7% over the prior fiscal first quarter.

“Our strategy is working. The momentum in our business from our last fiscal year continued into the first quarter with strong growth in revenues and bookings. We also achieved a non-GAAP operating margin of about 14%, and a GAAP operating margin of approximately 8% for the fiscal first quarter,” said Walden C. Rhines chairman and CEO of Mentor Graphics. “The strength of our first quarter gives us further confidence in our outlook for this fiscal year.”

For a reconciliation of GAAP to non-GAAP guidance, see “Discussion of Non-GAAP Financial Measures” below. These results are preliminary and subject to adjustment during the accounting close process. In particular, the preliminary GAAP income tax provision embedded in these results includes a number of assumptions subject to change in the normal course of the close process.

The company will report full fiscal first quarter results on May 27, 2011, before market open.

Fiscal Year Definition

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

Important Information

On March 31, 2011, the company filed a definitive proxy statement with the Securities and Exchange Commission (the “SEC”) in connection with the company’s upcoming 2011 annual meeting of shareholders. Shareholders are advised to read the company’s definitive proxy statement and any other relevant documents filed by the company with the SEC, before making any voting or investment decision because they contain important information. The definitive proxy statement is, and any other relevant documents and other material filed with the SEC concerning the company will be, when filed, available free of charge at <http://www.sec.gov> and http://www.mentor.com/company/investor_relations. In addition, copies of the proxy materials may be requested from the company’s proxy solicitor, MacKenzie Partners, Inc., by telephone at 1-800-322-2885 or by email at proxy@mackenziepartners.com.

Discussion of Non-GAAP Financial Measures

Mentor Graphics’ management evaluates and makes operating decisions using various performance measures. In addition to our GAAP results, we also consider adjusted gross margin, operating margin, net income (loss), and earnings (loss) per share which we refer to as non-GAAP gross margin, operating margin, net income (loss), and earnings (loss) per share, respectively. These non-GAAP measures are derived from the revenues of our product, maintenance, and services business operations and the costs directly related to the generation of those revenues, such as cost of revenue, research and development, sales and marketing, and general and administrative expenses, that management considers in evaluating our ongoing core operating performance. These non-GAAP measures exclude amortization of intangible assets, special charges, equity plan-related compensation expenses and charges, interest expense attributable to net retirement premiums or discounts on the early retirement of debt and associated debt issuance costs, interest expense associated with the amortization of debt discount and premium on convertible debt, impairment of long-lived assets, impairment of cost method investments, and the equity in income or losses of unconsolidated entities (except Frontline P.C.B. Solutions Limited Partnership (Frontline)), which management does not consider reflective of our core operating business.

CIMdata PLM Industry Summary

Identified intangible assets consist primarily of purchased technology, backlog, trade names, customer relationships, and employment agreements. Special charges primarily consist of costs incurred for employee terminations due to a reduction of personnel resources driven by modifications of business strategy or business emphasis. Special charges may also include expenses incurred related to potential acquisitions, abandonment of in-process research and development, excess facility costs, asset-related charges, post-acquisition rebalance costs and restructuring costs, including severance and benefits. Equity plan-related compensation expenses represent the fair value of all share-based payments to employees, including grants of employee stock options. For purposes of comparability across other periods and against other companies in our industry, non-GAAP net income (loss) is adjusted by the amount of additional tax expense or benefit that we would accrue using the normalized effective tax rate described below applied to the non-GAAP results.

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

- Amortization charges for our intangible assets are excluded as they are inconsistent in amount and frequency and are significantly impacted by the timing and magnitude of our acquisition transactions. We therefore consider our operating results without these charges when evaluating our core performance. Generally, the most significant impact to inter-period comparability of our net income (loss) is in the first twelve months following an acquisition.
- Special charges are incurred based on the particular facts and circumstances of acquisition and restructuring decisions and can vary in size and frequency. These charges are excluded as they are not ordinarily included in our annual operating plan and related budget due to the unpredictability of economic trends and the rapidly changing technology and competitive environment in our industry. We therefore exclude them when evaluating our managers' performance internally.
- We view equity plan-related compensation as a key element of our employee retention and long-term incentives, not as an expense that we use in evaluating core operations in any given period.
- Interest expense attributable to net retirement premiums or discounts on the early retirement of debt, the write-off of associated debt issuance costs and the amortization of the debt discount and premium on convertible debt are excluded. Management does not consider these charges as a part of our core operating performance. The early retirement of debt and the associated debt issuance costs are not included in our annual operating plan and related budget due to unpredictability of market conditions which could facilitate an early retirement of debt. We do not consider the amortization of the debt discount and premium on convertible debt to be a direct cost of operations.
- Impairment of cost method investments can occur when the fair value of the investment is less than its cost. This can occur when there is a significant deterioration in the investee's earnings performance, significant adverse changes in the general market conditions of the industry in which the investee operates, or indications that the investee may no longer be able to conduct business. These charges are

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inconsistent in amount and frequency. We therefore consider our operating results without these charges when evaluating our core performance.

- In connection with the Company's acquisition of Valor on March 18, 2010, we also acquired Valor's 50% interest in Frontline, a joint venture. We report our equity in the earnings or losses of Frontline within operating income. We actively participate in regular and periodic activities such as budgeting, business planning, marketing and direction of research and development projects. Accordingly, we do not exclude our share of Frontline's earnings or losses from our non-GAAP results as management considers the joint venture to be core to our operating performance.

- Equity in earnings or losses of unconsolidated subsidiaries, with the exception of our investment in Frontline, represents the net income (losses) in an investment accounted for under the equity method. The amounts represent our equity in the net income (losses) of a common stock investment. The carrying amount of our investment is adjusted for our share of earnings or losses of the investee. The amounts are excluded as we do not control the results of operations for these investments, we do not participate in regular and periodic operating activities and management does not consider these businesses a part of our core operating performance.

- Income tax expense (benefit) is adjusted by the amount of additional tax expense or benefit that we would accrue if we used non-GAAP results instead of GAAP results in the calculation of our tax liability, taking into consideration our long-term tax structure. We use a normalized effective tax rate of 17%, which reflects the weighted average tax rate applicable under the various jurisdictions in which we operate. This non-GAAP tax rate eliminates the effects of non-recurring and period specific items which are often attributable to acquisition decisions and can vary in size and frequency and considers our US loss carry forwards that have not been previously benefited. This rate is subject to change over time for various reasons, including changes in the geographic business mix and changes in statutory tax rates. The GAAP tax rate considers certain mandatory and other non-scalable tax costs which may adversely or beneficially affect our tax rate depending upon our level of profitability in various jurisdictions.

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

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

- Amortization of intangibles represents the loss in value as the technology in our industry evolves, is

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advanced, or is replaced over time. The expense associated with this loss in value is not included in the non-GAAP net income (loss) presentation and therefore does not reflect the full economic effect of the ongoing cost of maintaining our current technological position in our competitive industry, which is addressed through our research and development program.

- We regularly engage in acquisition and assimilation activities as part of our ongoing business and regularly evaluate our businesses to determine whether any operations should be eliminated or curtailed. We therefore will continue to experience special charges on a regular basis. These costs also directly impact our available funds.

- We perform impairment analyses on cost method investments when triggering events occur and adjust the carrying value of assets when we determine it to be necessary. Impairment charges could therefore be incurred in any period.

- Our stock option and stock purchase plans are important components of our incentive compensation arrangements and will be reflected as expenses in our GAAP results.

- Our income tax expense (benefit) will be ultimately based on our GAAP taxable income and actual tax rates in effect, which often differ significantly from the 17% rate assumed in our non-GAAP presentation. In addition, if we have a GAAP loss and non-GAAP net income, our non-GAAP results will not reflect any projected GAAP tax benefits. Similarly, in the event we were to have GAAP net income and a non-GAAP loss, our GAAP tax expense would be replaced by a credit in our non-GAAP presentation.

- Other companies, including other companies in our industry, calculate non-GAAP net income (loss) differently than we do, limiting its usefulness as a comparative measure.

MENTOR GRAPHICS CORPORATION

UNAUDITED RECONCILIATION OF GAAP TO NON-GAAP

EARNINGS PER SHARE

The following table reconciles management's estimates of the specific items excluded from GAAP in the calculation of estimated non-GAAP net income (loss) per share for the first quarter of fiscal 2012 and the specific items excluded from GAAP in the calculation of non-GAAP net loss per share for the first quarter of fiscal 2011.

	Estimated Q1 FY12	Q1 FY11
Diluted GAAP net income (loss) per share	\$(0.06) - \$(0.02)	\$ (0.22)
Non-GAAP Adjustments:		
Amortization of purchased intangible assets (1)	0.03	0.04
Amortization of other	0.02	0.03

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identified intangible assets (2)		
Equity plan-related compensation (3)	0.05	0.06
Special charges (4)	0.03	0.03
Other expense, net and interest expense (5)	0.11	0.01
Non-GAAP income tax effects (6)	(0.00) - (0.02)	0.03
Non-GAAP net income (loss) per share	\$0.18 - \$0.20	\$ (0.02)

- (1) Excludes amortization of purchased intangible assets resulting from acquisition transactions. Purchased intangible assets are amortized over two to five years.

- Excludes amortization of other identified intangible assets including trade names, employment agreements, customer relationships, and deferred compensation resulting from acquisition transactions. Other identified intangible assets are amortized over two to five years. This line item (2) also excludes amortization of purchased intangible assets identified as part of the fair value of the Frontline P.C.B. Solutions Limited Partnership investment. The purchased technology will be amortized over three years and other identified intangible assets will be amortized over three to four years.

- (3) Excludes equity plan-related compensation expense.

- Excludes special charges consisting primarily of consulting fees associated with our proxy contest, (4) costs incurred for employee rebalances (which includes severance benefits, notice pay and outplacement services), facility closures, and acquisition costs.

- Adjustment for the first quarter of fiscal 2012, reflects the amortization of original issuance debt discount and premium for our 6.25% Convertible Subordinated Debentures due 2026, the (5) amortization of original issuance debt discount for our 4.00% Convertible Subordinated Debentures due 2031 and charges associated with the retirement of our 6.25% Convertible Subordinated Debentures and Term Loan. Adjustments for the first quarter of fiscal 2011, reflect the amortization of original issuance debt discount and the loss on an investment accounted for under the equity method of accounting.

- Non-GAAP income tax expense adjustment reflects the application of our assumed normalized (6) effective 17% tax rate, instead of our GAAP tax rate, to our non-GAAP pre-tax income. The preliminary GAAP income tax provision embedded in these results includes a number of assumptions subject to change in the normal course of the close process.

MENTOR GRAPHICS CORPORATION

UNAUDITED RECONCILIATION OF GAAP FINANCIAL MEASURES TO NON-GAAP FINANCIAL MEASURES

(In thousands, except percentages)

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Three Months Ended April 30, 2011	Estimated Q1 FY12	
GAAP operating income	\$	17,394
Reconciling items to non-GAAP operating income:		
Amortization of Frontline purchased technology and other identified intangible assets		1,242
Equity plan-related compensation		5,097
Amortization of purchased intangible assets:		
Cost of revenues		3,357
Amortization of intangible assets		1,611
Special Charges		3,759
Non-GAAP operating income	\$	32,460

Three Months Ended April 30, 2011	Q1 FY12	
GAAP operating income as a percent of total revenues	8	%
Non-GAAP adjustments detailed above	6	%
Non-GAAP operating income as a percent of total revenues	14	%

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Synopsys Announces Earnings Release Date and Conference Call for the Second Quarter Fiscal Year 2011

5 May 2011

Synopsys, Inc. announced it will report results for the second quarter fiscal year 2011 on Wednesday, May 18, 2011, after the market close.

A conference call to review the results will begin at 2 p.m. PT (5 p.m. ET) and will be hosted by Aart de Geus, chairman and chief executive officer, and Brian Beattie, chief financial officer.

Financial and other statistical information to be discussed on this conference call will be available on the corporate website at <http://www.synopsys.com> immediately before the call. A live webcast will also be available on this site. Participants should access the live webcast at least 10 minutes prior to the start of the call. A webcast replay can be accessed on the corporate website beginning Wednesday, May 18, 2011, at approximately 5:30 p.m. PT. The replay will remain available until Synopsys announces its third quarter fiscal year 2011 results in August 2011. In addition, a dial-up replay of the conference call will be available beginning May 18, 2011 at 4:00 p.m. PT, ending on June 1, 2011 at midnight. The replay telephone number is USA (800) 475-6701, and International (320) 365-3844, Access Code:

203338.

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Tata Technologies Receives Equity Funding

3 May 2011

Tata Technologies announced it has completed a round of equity funding for Rs.141.06 Cr. (\$30 million USD) from Alpha TC Holdings Pte. Ltd. and Tata Capital Growth Fund I. The investment represents a 13.04% equity stake on fully diluted basis.

Alpha TC Holdings Pte. Ltd. and Tata Capital Growth I, specialize in investing in mid-sized companies within India that are market segment leaders which demonstrate high growth potential.

Commenting on this significant development, Patrick McGoldrick, Tata Technologies Managing Director and CEO, said; “We welcome our new investors, their vote of confidence in the business model we have created and their commitment to help us grow our company. With this investment, we will continue to aggressively grow our business and provide our customers with better, more innovative products.”

“Mizuho Securities is pleased with the investment made by Alpha TC Holdings Pte. Ltd. in a top-quality engineering and product development company like Tata Technologies,” said Shigeki Usuki, Head of Investment Department – Mizuho Securities. “We anticipate that such investments will fulfill the promise of the Fund to connect exceptional Indian businesses to potential Japanese customers.”

“Tata Technologies has strong expertise in manufacturing-related verticals, positioning it in the sweet spot of the third wave of outsourcing. We are confident that its highly-talented international executive leadership will leverage the business model and macro factors, as well as its incumbent advantage to create the top specialized engineering and product development business in India” said Akhil Awasthi, Managing Partner – Tata Capital Growth Fund.

Tata Technologies is the first of its kind in India to offer full-vehicle development capabilities with a robust offshore engineering engagement model to reduce cost and deliver benchmark quality products. Tata Technologies’ revenue has doubled over the past five years and its profits have grown by over 11 times. The company is positioned to become the number-one partner to manufacturers worldwide.

About Tata Capital

Tata Capital Limited is a subsidiary of Tata Sons Limited. The Company is registered with the Reserve Bank of India as a Systemically Important Non Deposit Accepting Non Banking Financial Company (NBFC) and offers fund and fee-based financial services to its customers. Tata Capital Limited caters to the diverse needs of retail, corporate and institutional customers, directly or indirectly, through its subsidiaries across various areas of business namely the Commercial Finance, Investment Banking, Private Equity, Infrastructure Finance, Securities, Wealth Management, Consumer Loans, Cards and Travel Related Services.

About Tata Capital Growth Fund

Tata Capital Growth Fund I, is sponsored by Tata Capital Limited, is established as an irrevocable trust under the Indian Trusts Act, 1882, and is registered with the Securities and Exchange Board of India (“SEBI”) as a venture capital fund under the SEBI (Venture Capital Funds) Regulations, 1996, as amended from time to time.

About Alpha TC Holdings Pte. Ltd.

Alpha TC Holdings Pte. Ltd. is a private limited company incorporated under the laws of Singapore and wholly-owned subsidiary of the partnership sponsored by Mizuho Securities and other international investors.

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Implementation Investments

Bosch Deploys Cadence Unified Custom/Analog Flow to Gain Overall Design Productivity

2 May 2011

Cadence Design Systems, Inc. announced that Robert Bosch GmbH (Bosch) has standardized on an enhanced custom/analog flow based on [Cadence® Virtuoso® v6.1](#) technology, gaining approximately a 25 percent advantage in productivity for advanced custom/analog silicon design. Bosch and Cadence continue to build upon a longstanding and successful collaboration with the aim of accelerating Bosch's innovation and time to market, while ensuring the highest quality and reliability for its broad range of high-performance integrated circuits. The Cadence custom/analog flow includes all elements of silicon, package, and board and provides unified design intent, abstraction, and convergence through the flow – essential to achieving a more deterministic path to [Silicon Realization](#).

Driving design intent and convergence pervasively through the custom/analog flow is especially critical for the high-performance and strict reliability requirements of the automotive IC industry. The Cadence unified custom/analog flow provides Bosch an integrated and modular IC development flow well suited for modern IC and MEMS technologies. Leveraging a holistic constraint-driven design methodology across a common backplane through Cadence Virtuoso Schematic Editor, Virtuoso Analog Design Environment, and Virtuoso Layout Suite, Bosch was able to save valuable design time across all process technologies and meet the high quality standards for its safety-critical applications.

“Serving a very cost-sensitive market such as automotive with high-quality standards requires a comprehensive design, verification, and implementation solution which is based on a proven design methodology within a powerful automated design environment,” said Dr. Peter van Staa, Vice President Engineering at Bosch. “A close R&D collaboration with Cadence was key to addressing our specific custom/analog flow requirements with Virtuoso, and we were impressed with the Cadence responsiveness and the productivity advantage this gave our design teams.”

As a result of this successful collaboration around the Cadence unified custom/analog flow, Bosch yielded approximately a 25 percent design productivity gain compared to a multi-vendor point-tool approach that was used in previous designs. Significant productivity and quality gains were achieved by leveraging the constraint-driven design methodology and the new electrically driven design framework in the latest version of the Cadence Virtuoso v6.1 custom IC design technology.

“Being selected by Bosch, the leading worldwide supplier for automotive electronics, underscores the significant technology leadership Cadence offers to advanced custom/analog design teams,” said John Stabenow, Group Director, Custom/Analog Product Management at Cadence. “We are committed to the EDA360 vision and delivering on the promise of a more deterministic end-to-end path to silicon, as well as the industry call for higher productivity and profitability. The result of our collaboration with Bosch is proof positive that Cadence is answering that call.”

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The enhanced custom/analog flow, available immediately, supports the Cadence approach to Silicon Realization through its focus on unique and pervasive design intent, abstraction, and convergence from schematic-to-GDSII, through to packaging. Silicon Realization is a key element of the [EDA360 vision](#).

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Building System and Diagnostics Pte Ltd Adopts CD-adapco's STAR-CCM+ for Ventilation and Airflow Analysis

4 May 2011

CD-adapco announced that Building System and Diagnostics Pte Ltd (BSD) has adopted STAR-CCM+ for its ventilation and airflow analysis for building designs.

Today, many building design companies use simulation in areas ranging from architectural rendering to engineering data analysis in order to ensure plans offer a safe, comfortable environment for occupants in the most energy efficient manner possible. For years, CD-adapco has assisted companies with applications in building and environmental flows including ventilation, indoor air quality, HVAC, pedestrian comfort, thermal comfort, solar and thermal radiation, complex glazing, wind loading, and fire and smoke. BSD, a pioneering building consultancy company in the field of building performance simulations for city planning, architectural and building design in Singapore, has decided to implement STAR-CCM+ into its building design process.

“STAR-CCM+ suits our requirements due to its robustness, ease of use and its ability to handle complex geometry that we normally encounter in today’s building designs. The support that CD-adapco’s Singapore office provided sealed the collaboration.” said Mr. Tan Phay Ping, Managing Director at BSD. “We are working on improving the turnaround time for each project so that our analysis is timely for the architect. With STAR-CCM+, we may be closer to achieving this.”

The software will be used to predict the airflow patterns around and within buildings or cities so that buildings are designed for good cross ventilation and minimal urban heat entrainment effects. Together with CD-adapco, BSD expects to increase the acceptance and use of computer simulation as a design tool for the building and construction industry.

About BSD

[BSD](#) provides specialized independent consultancy services in the field of climate change, ecologically sustainable building designs, asset protection, energy management, building research and development and continuous education. Our building performance simulations services (airflow and ventilation, daylighting and solar radiation, energy consumption and thermal dynamics) allow buildings to be designed and built to the highest standards of energy and environmental sustainability.

The Company has provided energy efficiency and environmental planning advisory services for more than 100 building developments in Singapore, Malaysia, India, Indonesia and China. BSD is a private limited company having its headquarters in Singapore and with offices in Singapore, Malaysia and China. It has also successfully completed numerous large research and development projects funded by governmental agencies locally and internationally.

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Catalog Data Solutions CAD Download Solution Implemented by Newport

3 May 2011

Catalog Data Solutions ([CDS](#)) announced that Newport Corp. has implemented its online CAD download solution.

[Newport Corp.](#) manufactures a vast array of advanced technology products and includes industry leading brands such as New Focus™, Oriel® Instruments, Richardson Gratings™ and Spectra-Physics®. “We have offered CAD model downloads from our website for several years. Our customers rely on the information to build into new design projects. In 2009, Newport acquired New Focus, adding a number of new high-performance products,” said Tom Miller, Director, Web Business Group, Newport. “New Focus had already been using the [CDS ModelServer](#) SaaS solution for over 5 years; while Newport used another vendor’s solution. Our team evaluated the alternatives and decided to standardize on the CDS solution. CDS’ technology, customer service, flexibility, adaptability, configurability and cost advantages all factored into that decision.”

Catalog Data Solutions helps industrial suppliers and distributors grow sales and strengthen customer loyalty through interactive online catalogs, ecommerce, 3D CAD model delivery and product configurator solutions.

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Dow Corning Chooses SAP to Create Product Compliance Documents for 14,000 Products in 100 Countries

3 May 2011

To help longtime customer [Dow Corning](#) stay compliant, reduce risk and minimize cost, SAP AG announced that the chemical manufacturer will rely on the new [SAP® EHS Regulatory Documentation OnDemand](#) content service to provide 100,000 safety data sheets in more than 30 languages for its 14,000 products sold in over 100 countries. By taking advantage of the orchestration between the on-demand content delivered by SAP and the on-premise SAP® Environment, Health, and Safety Management (SAP EHS Management) application, Dow Corning can maintain its core competency in silicon-based products and solutions and overall responsibility for product stewardship and chemical management regulations, while depending on SAP to efficiently provide product compliance data and documents to comply with widely varying local regulations.

Like many companies, Dow Corning is required to constantly monitor rapidly changing product safety regulations in emerging countries and apply the relevant changes to their product compliance documents. Even more challenging, the company must always be prepared to answer questions about the chemical composition and exposure scenarios for all its products. It must comply with country, state, and/or local regulations and provide correct, up-to-date information in various languages for hazard and regulatory classification and compliance documents. To add to the complexity, this information is constantly changing, making it difficult to keep up with the latest compliance laws in any given country.

Dow Corning’s decision to use SAP EHS Regulatory Documentation OnDemand helps ensure that up-to-date and accurate regulatory requirements are reflected in the product compliance data and documents that are generated by the SAP solution. In addition, Dow Corning will benefit from the standardization of global processes and content, which will help reduce risks and allow the company to continue to avoid fines, product impoundment and product liability claims.

Expansion in Leaps and Bounds

Dow Corning has been managing product compliance since 1999 using SAP EHS Management. However, the growing complexity of new regulations, including Global Harmonized Standard and REACH, along with the business growth in countries outside of its historic bases of operation led to the decision to subscribe to SAP EHS Regulatory Documentation OnDemand. The on-demand content service provides Dow Corning flexibility in addressing these demands, reduces compliance risk and allocates resources for the best value.

“In such a complex business, we have long relied on SAP software and services to help us maintain compliance with global regulations,” said Peter Cartwright, vice president, Environment, Health & Safety, Dow Corning. “This additional step will enable us to focus our resources on other regulatory issues while SAP EHS Regulatory Documentation OnDemand helps us to standardize the safety data sheet generation processes globally.”

Inside the Unique Business Process

To manage this undertaking, SAP will use the interoperable environment between Dow Corning's existing SAP EHS Management application and the back office at SAP that supports SAP EHS Regulatory Documentation OnDemand. This back office is maintained and operated by SAP product compliance experts who manage the automated development of component and product hazard and regulatory classifications, safety data sheets, labels and tremcards (transportation emergency cards). These data and documents will be made available in the SAP EHS Management system at Dow Corning for use in other compliance tasks, such as REACH compliance, and document distribution to customers, with native integration with the enterprise resource planning (ERP) application SAP® ERP also at Dow Corning.

Next Major Event: SAPPHIRE® NOW Conference

With SAPPHIRE® NOW, SAP offers customers, partners and prospects even more opportunities to engage in dialogue with peers, participants and thought leaders at the premier educational and networking event. Being held in Orlando, Florida, May 15-18, 2011, the SAP customer conference connects attendees on site with global participants through state-of-the-art broadcast studios and an online experience that incorporates the latest social media and community functionality. Whether on site or online, participants can gain insight as to how SAP is delivering on its product strategy and helping organizations around the world to run better. For more information, visit <http://www.sapphirenow.com> For announcements, blog posts, videos and other coverage leading up to and during the event, visit the SAPPHIRE NOW newsroom at <http://www.sapphirenow.news-sap.com>.

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From Motorsports to Defence

6 May 2011

The flexibility of Delcam's PowerSHAPE CAD software has helped Formaplex, a Portsmouth-based manufacturing group specialising in high-end automotive injection moulding, machining and composite technologies, to diversify into a number of other industries.

The latest stage in this expansion has seen the company playing a key role in the development of Force Protection Europe's Ocelot, a new light-protected patrol vehicle that provides unprecedented levels of survivability for troops facing IEDs and other threats. Formaplex has now been awarded a contract to

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supply 200 of the blast-proof pods that protect the crew and passengers of the vehicle, for the MoD's Light Protected Patrol Vehicle programme. The British Army will call these vehicles, which have been designed, developed and are being manufactured in the UK, Foxhounds. .

The Ocelot has a modular design which enables different pods to be swapped out to equip the vehicles for different missions, such as patrol, fire support or protected logistics. The vehicle is also designed for exceptional manoeuvrability, so it is equally effective in the tight confines of built-up urban areas and for tactical manoeuvre on difficult terrain typically found on current operations in Afghanistan.

Formaplex's crucial contribution is highlighted by the fact that one of the composite pods delivered for testing has survived no less than nine blast tests designed to replicate the impact of explosive devices encountered in war zones such as Afghanistan. The company has invested significant resources in its manufacturing capability for defence applications, including post-machining and repair solutions for field-damaged protective pods.

Ian Wilson, who began his career as an engineering apprentice and who now has thirty years of machining and design experience, originally co-founded Formaplex in 2001 to offer machining services to Formula One, Le Mans and other motorsport teams. "We provided a next-day service that was pretty much unheard of in those days," remembered Mr. Wilson, who is now Projects Director.

"The rapid delivery and a reputation for accuracy provided regular work from the motorsport teams. Even so, the company needed to find other work to complement the hectic F1 season and provide a more consistent workload, so we moved into prototyping by means of rapid injection mould tooling and then into low volume production tooling, mainly for high-end automotive and specialist vehicles," said Mr. Wilson. "We have invested in a moulding facility and can offer the ultimate one-stop shop for our customers. We have integrated the mythology and philosophy of our rapid-response F1 service into these other areas to win more business. Our current customer base now extends into Europe"

"We first added PowerSHAPE when we progressed from offering only machining services," stated Mr. Wilson. "All the best designers interviewed were using PowerSHAPE so it was an obvious choice to make. The software has always met our requirements for speed and accuracy so we've never felt any need to try anything else. It helps us to complete complex projects in a fraction of the time that it would take a traditional toolmaker."

Formaplex now uses six seats of PowerSHAPE. In addition to the speed, the flexibility of the software is a great benefit to the company. It is used for some product design but mainly for patterns, jigs, fixtures, composite lay-up tools and moulds of all types, including injection, RTM and RIM.

"The other factor in our success is the quality of the staff that we have been able to bring in as the company has expanded," explained Mr. Wilson. "A downturn in manufacturing over the past few years has forced the closure of several manufacturing companies in the region so we have been able to recruit some very skilled and experienced people, mostly already known to us. We expect to take on another twenty-five to thirty people in the next six months to enable us to complete the current newly-developed projects, including Ocelot."

The Ocelot project is testament to the skills of the staff who are able to adapt quickly to new methods of manufacture, enabling Formaplex to rapidly build the business.

"Becoming involved in such an exciting programme is a big milestone in our company's development," he added. "We are very proud that our technology will potentially be saving lives and protecting troops from injury. The publicity around the project has generated a lot of interest in Formaplex and its

services, which we are confident we will turn into extra business.”

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INITEC Energía Adopts AVEVA Diagrams

4 May 2011

AVEVA announced that INITEC Energía has transferred its diagrams and P&ID system to AVEVA Diagrams.

INITEC Energía is one of Spain's leading engineering companies focusing on the construction of power generation facilities, including coal fired, combined cycle and thermosolar power plants. Part of the ACS Group's industrial division, it has over 50 years' experience, both nationally and internationally.

AVEVA Diagrams is an efficient application for creating P&IDs and HVAC diagrams in a model database, from where they are easily accessible by all the other designers in a project. It has access to all the database and shares the same technology as the AVEVA PDMS 3D modeling applications and allows schematic data to be globally distributed in multi-location projects.

"We switched to AVEVA Diagrams from another system that was not so efficient in providing the degree of compatibility that we needed with PDMS. The new system easily integrates our information upstream, making our overall workflow much more productive. Thanks to the fact that the AVEVA engineering and design applications share the same database structure, the combination of AVEVA Diagrams, Schematic 3D Integrator, and PDMS is an ideal solution for our unified engineering strategy," said Ms. Sangeetha Narayan, IT Manager at INITEC Energía.

"INITEC Energía has been an AVEVA PDMS, 3D design customer for over 20 years and they have based many of their working practices on our technical principles. We are very proud that INITEC Energía has selected AVEVA Diagrams and we are confident that our Integrated Engineering & Design technology will be the solution of choice for many more of our 3D modeling customers," adds Fabien Dufrenet, Country Manager Spain.

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IOsemi Adopts Berkeley Design Automation Analog FastSPICE™ Platform

26 April 2011

[Berkeley Design Automation, Inc.](#) announced that IO Semiconductor Inc., a fabless semiconductor company developing high-performance front-end chips for multi-band, multi-mode cellular applications, has selected the company's AFS Platform for RF verification and characterization.

"At IOsemi we have tremendous verification and characterization challenges for our ZEROcap™ CMOS technology designs," said Stuart Molin, CTO at [IOsemi](#). "We have standardized on the Analog FastSPICE Platform because it provides nanometer SPICE accuracy 5x to 10x faster than traditional SPICE, exceeding our requirements for verification and characterization of our high-performance CMOS RF front-end devices."

The Analog FastSPICE Platform is the industry's only unified verification platform for nanometer analog, RF, mixed-signal, and custom digital circuits. The AFS Platform combines foundry-certified nm SPICE accuracy, 5x-10x faster single-core performance than any other SPICE circuit simulator, >10M-

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element capacity, and the industry's only comprehensive silicon-accurate device noise analysis. The AFS Platform is a single executable that uses advanced algorithms and numerical analysis to rapidly solve the original device equations and full-circuit matrix without any approximations. It includes licenses for AFS Nano SPICE simulation, AFS circuit simulation, AFS Transient Noise Analysis, AFS RF Analysis, and AFS Co-Simulation.

"We are delighted with the IOsemi selection of the Analog FastSPICE Platform for their verification and characterization flow," said Ravi Subramanian, president and CEO of Berkeley Design Automation. "Achieving best-in-class cellular front-end performance in an RF-CMOS platform is a tremendous challenge. IOsemi's adoption of the AFS Platform reinforces the fact that today's leading fabless semiconductor companies select Berkeley Design Automation for nanometer circuit verification."

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Lufthansa Technik Simulates Aircraft Engine Wear and Tear

2 May 2011

[Lufthansa Technik AG](#) is leveraging simulation software from ANSYS to simulate wear and tear of aircraft components, particularly in jet engines, to prolong service intervals and to create new ways to repair used parts. Part of Lufthansa Group, the German company is one of the world's largest providers of maintenance, repair and overhaul (MRO) support services for aircraft.

As an aviation authority-approved development and production organization, Lufthansa Technik performs its own research to investigate blade damage due to bird strike and gradual erosion resulting from particles in the air, for example. By using simulation solutions from ANSYS, the company can gain a profound understanding of these processes, optimize the timing for parts replacement and develop new repair methods. Lufthansa Technik uses structural mechanics and fluid dynamics from ANSYS to perform, among other applications, studies on structural and thermal loads on different engine modules for several engine types.

"By researching wear of turbine blades, we are helping our customers to increase engine service life. Using innovative repair methods that we develop, these same customers can possibly avoid purchasing expensive new parts. For an airline, this is money in the bank," said Christian Werner-Spatz at Lufthansa Technik AG. "Multiphysics simulation software from [ANSYS](#) allows us to understand the operating environment of jet engine components and draw conclusions from these results with a high degree of confidence."

"Lufthansa Technik AG uses our software not to develop completely new products, but to increase service life for aircraft turbines. Condition-based maintenance and developing a deeper understanding of asset lifecycles are becoming more important as airlines struggle to control costs," said Rob Harwood, director of aerospace marketing at ANSYS. "Mere experience is not sufficient anymore in today's fast-changing and complex environment. As Lufthansa Technik AG has demonstrated, ANSYS simulation technology is being used at the forefront of this research. Companies that are leaders in their field, like Lufthansa Technik, are increasing their use of simulation technology to gain deep insight into how components behave under loads and, therefore, a better understanding of processes."

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Siemens Extends PLM Software Support for Daimler AG; Extensive Rollout of NX to Daimler AND

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its Global Suppliers

3 May 2011

[Siemens PLM Software](#) announced that Daimler AG has extended its commitment to Siemens PLM Software and its products for total of 10 years and has pledged to an extensive rollout for the replacement of its current computer-aided design (CAD) environment with [NX™ software](#). Daimler's NX deployment for passenger cars will be complete by the end of 2015 and for trucks by the end of 2016 – the most rapid implementation/switch possible.

As part of the worldwide 10-year agreement, Daimler AG will begin using Siemens PLM Software's technology in its first vehicle series beginning in 2012. Siemens PLM Software will begin enabling Daimler's vast network of suppliers beginning July 2011 Daimler's objective is to further improve the support of its business processes by implementing a seamlessly integrated CAD suite.

"Daimler's clear commitment and implementation plan for NX highlights the enhanced strategic relationship we initially announced in November 2010 and underscores the long-term relationship that we're both looking for in this union," said Chuck Grindstaff, president and chief technology officer, Siemens PLM Software. "The growing complexity of vehicle design and development has forced numerous automotive companies to evaluate the systems currently in place to ensure they are using best-in-class technology – Daimler is no exception."

Siemens PLM Software has a successful relationship with Daimler through its existing [Teamcenter®](#) software implementation. Following an extensive evaluation, Daimler made the decision to continue using Teamcenter as its standard for product data management and PLM, and to also migrate from its current CAD technology to NX.

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UK Outdoor and Sports Brands to Implement Visual PLM.net®

5 May 2011

[Visual 2000 International Inc.](#) announces that UK activewear brand manager Outdoor and Sports Company Limited ([OSC Ltd](#)) has begun implementation of its [Visual PLM.net®](#) product lifecycle management (PLM) solution at its Hyde, Greater Manchester headquarters. The software promises to accelerate key business processes and empower more efficient and sustainable growth across the Ronhill®, Sprayway, and Mountain Equipment product lines. Following a phased adoption, all three brands are expected to complete implementation of the new software this autumn.

According to OSC Ltd Chairman Stephen Cann, "Visual 2000 offers a solution that will allow us to improve our internal processes and assist the communication with our manufacturing partners. The team is looking forward to implementing the system and to the improvements that will help the business achieve its goals."

OSC Ltd will initially implement about 50 PLM users across its product development processes, including design, merchandising, and quality assurance teams. The company will also take advantage of free vendor licenses provided in the system to extend secure system access to its global supply chain partners. By bringing its manufacturers and suppliers online, OSC Ltd will greatly enhance collaboration around its products and increase process visibility into the entire design-to-delivery product lifecycle.

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Product News

Alcove9 Joins Aras Partner Program and Offers Enterprise Search Solution for Aras Product Lifecycle Management Platform

5 May 2011

[Aras®](#) announced that Alcove9, a business unit of The vdR Group, an independent developer of engineering and manufacturing software solutions located in Orange, California, has joined the Aras partner program and launched an advanced search solution for the Aras Innovator PLM software suite. The Alcove9 search solution delivers unified access to disparate file system structures, including electronic content management (ECM), enterprise resource planning (ERP) and product lifecycle management (PLM) systems, enabling users to search, find, retrieve and act upon content.

With the Alcove9 search solution, Aras users can immediately locate part and product data residing in unrelated repositories, applications and content formats throughout an enterprise. This instant access to enterprise-wide information enables companies to improve productivity, optimize design and reuse, accelerate time-to-market and reduce new product development costs. An open source architecture and interactive discovery and analysis tools enhance accessibility and usability while providing additional functionality.

“In Alcove9, we’ve re-architected our technology to an open source platform and we believe there’s no better way to launch our new offering than with a like-minded partner such as Aras,” said Martin van der Roest, President of Alcove9. “As the industry’s leading open source PLM solution, Aras has brought a much needed paradigm shift to the PLM industry and we are delighted to be a part of this movement.”

“As new product development becomes more complex and geographically dispersed, advanced search becomes increasingly critical so we are very pleased to welcome Alcove9 to the Aras Partner Program and the Aras Community. We know this solution is one our Community Members will find appealing and we applaud Alcove9 for migrating to an open source platform,” said Peter Schroer, President of Aras.

About Alcove9

Alcove9, a business unit of The vdR Group, Inc., represents the open source re-architecture of a software solution that has been adopted by over 120,000 combined users in engineering and manufacturing organizations across multiple industries. The vdR Group is a privately held software development company founded in 1986. The Group’s primary focus is the design, development and delivery of integration technologies and solutions for manufacturing and engineering environments. These activities are done in collaboration with selected partners that market and sell the resulting solutions. Today there are an estimated 190,000 users of vdR Group solutions. For more information please visit <http://www.Alcove9.com> or <http://www.vdR.com>

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ArchiCAD 15 – Broaden Your Design Horizons

3 May 2011

GRAPHISOFT announced ArchiCAD 15, the latest version of its premium design software for architects. ArchiCAD 15 enriches architectural forms available for designers and expands the scope of

the BIM workflow to include renovation & refurbishment projects.

Enriched Architectural Forms

The evolution of forms has always walked hand-in-hand with the evolution of structures. From the simplest barrel vaults to the most sophisticated rib vaults, the architect has always aspired to combine durability, utility and beauty (Vitruvius). These very principles can be seen in the finest examples of modern architecture as well. ArchiCAD 15 expands the design capabilities of its BIM tools, including new Shell structures, to support the broadest spectrum of architectural shapes and forms found in both classical and modern architecture.

New Definition of Design Space

The evolution of the design process has gone through at least as many revolutionary steps as the forms and structures themselves. During the course of the past few decades, architects have gradually left the “flat-lands” of 2D sketching for the exciting “high-lands” of designing in 3D virtual spaces. The increase in freedom brought about by the third dimension, however, adds a new degree of difficulty to orientation in space as well. ArchiCAD 15 introduces 3D guidelines and editing planes to revolutionize the 3D space definition, making the perspective view the natural, 3D environment for building design.

Renovation Workflow Support

The advent of modern technology has significantly increased the life-cycle of a building. As a result, renovation and refurbishment projects are nearly equal to the volume of new buildings in most of the developed areas of the world. ArchiCAD 15 expands the design scope to renovation and refurbishment projects with native BIM design and documentation workflow support all the way through.

In addition to the impressive list of new and refined design tools and workflows, ArchiCAD 15 includes improvements to its IFC interface and OPEN collaboration workflow with engineers, full 64-bit support for the Mac OS, and improvements to its parametric object libraries as well.

ArchiCAD 15 will be released May 23, 2011. Shipment to customers will begin a few weeks after the official release. Following a tight release schedule, all 26 local versions are planned to reach the market by the end of Q3 2011. For more information about ArchiCAD 15 please visit:

<http://www.graphisoft.com/archicad>

For a live demonstration of ArchiCAD 15, please register for the upcoming [“BIM and DESIGN” Webinar](#) on June 7, 2011.

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Autodesk Buzzsaw Mobile App Provides Access to Building and Construction Data on iPad or iPhone

5 May 2011

Autodesk, Inc. announced the Autodesk Buzzsaw Mobile app designed for iPhone and iPad. The app provides [Autodesk Buzzsaw](#) collaboration software users with more secure, remote access and exchange of building project information. Buzzsaw Mobile enables users to view DWF files, standard office documents and images, as well as upload project photos to a designated Buzzsaw project site.

With support for mobile viewing of DWF files, Buzzsaw Mobile app users can collaborate across teams. When used in conjunction with the [AutoCAD WS](#) mobile app, iPad and iPhone users can view and edit [AutoCAD](#) DWG and DXF files and save the changes to a Buzzsaw project site, directly from AutoCAD

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WS. Buzzsaw Mobile is a key component of the Autodesk BIM 360 ([Building Information Modeling](#)) strategy for collaboration and data management for the architecture, engineering and construction (AEC) industries.

“Buzzsaw Mobile helps deliver on our Autodesk BIM 360 vision for ‘anywhere access’ to project data,” said Rick Rundell, senior director, AEC strategic technology, Autodesk. “Together with [Autodesk Vault](#) Collaboration AEC software, AutoCAD WS mobile app and [Autodesk Navisworks](#) software products, Buzzsaw Mobile helps provide building, infrastructure and plant project teams with a complete and more accurate digital view of their project, with access to information across the project lifecycle from wherever they need it—the office, the web, or the field.”

Autodesk Buzzsaw and Buzzsaw Mobile

Autodesk Buzzsaw software is a cloud-based document, design and model management solution for centralizing and more securely exchanging AEC project information. Users can access the latest project information from desktop PCs, the web or mobile devices. Autodesk Buzzsaw is designed to help support better multi-discipline, cross-company communication and collaboration, regardless of geographical location, project scope, or complexity. Fully integrated into the portfolio of Autodesk design and data management solutions, Autodesk Buzzsaw enhances building information modeling with cloud-based technology, helping architects, engineers, and contractors to focus more on project delivery and less on managing costly IT infrastructure.

Buzzsaw Mobile helps iPhone and iPad users view DWF files, view and save project and standard office documents for offline viewing, and upload project photos directly to a cloud-based Buzzsaw project site. Other mobile access options for Buzzsaw data include using AutoCAD WS for iPad and iPhone to access any DWG file managed on a Buzzsaw project site. Users can then view, edit and save changes back to the Buzzsaw project site. In addition to Buzzsaw Mobile and AutoCAD WS, mobile users may also access Buzzsaw files directly from a growing ecosystem of mobile productivity apps that allow more secure access to Buzzsaw using the industry standard WebDAV protocol.

Buzzsaw Mobile can be downloaded at <http://www.autodesk.com/buzzsaw-mobile>. Mobile users without access to a Buzzsaw site can also download a free* [30-day trial](#) of Buzzsaw.

*Free products are subject to the terms and conditions of the end-user license and services agreement that accompanies the software.

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Autodesk SketchBook Pro App Reaches Next Level on iPad 2

5 May 2011

Autodesk, Inc. introduced a new version of the company’s popular Autodesk SketchBook Pro for iPad app, designed to take full advantage of the new features and processing power of iPad 2.

The Autodesk SketchBook Pro for iPad app combines high-quality digital pencils, pens, markers and airbrushes so anyone can create rich, high-quality digital artwork with powerful sketching tools. The latest update of the app leverages the features of iPad 2 to create the highest resolution digital canvas yet, so users can produce quality prints directly from the iPad.

What’s more, enhanced interoperability and portability between iOS devices means users can start creating an image on an iPhone and continue working on it on an iPad, or finish it on a Mac. Autodesk

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SketchBook Pro for iPad now offers 90 new brushes and brush controls. Together with the new customizable palettes and gestures, users can instantly access their favorite brushes and colors.

New key features of the Autodesk SketchBook Pro for iPad 2 app enable users to:

- Import photos directly to the layer editor from iPad 2's camera;
- Create high-resolution canvases at 2,048-by-1,536-pixel resolution with up to four layers for an image output of 5-by-7 inches at 300 dpi or 8-by-10 inches at 200 dpi;
- Standard 1,024-by-768 canvases can now have up to 12 layers; and
- Export and import images through Dropbox within the app to easily transport work between iPhone, iPod touch, iPad and Mac.

In addition, an in-app store is now available, offering five new brush sets with unique brush types, textures and stamps, which are free* to [SketchBook Pro](#) users.

About the Autodesk SketchBook Pro Products

Autodesk SketchBook Pro for iPad app is available for US\$4.99 exclusively from the App Store on iPad or at <http://www.itunes.com/appstore>. Also available on the App Store is Autodesk [SketchBook Mobile](#) for iPhone and iPod touch. To learn more about the SketchBook products, visit the [SketchBook Pro page](#).

**Free products are subject to the terms and conditions of the end-user license and services agreement that accompanies the software.*

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Cadac Organice Introduces SharePoint Framework for the Mining Industry

3 May 2011

Cadac Organice, Microsoft Partner Network member and developer of the [Cadac Organice Product Suite](#) (a SharePoint based solution for engineering document management and document control), introduces a SharePoint framework for the mining industry.

Document management and control for project-driven industries

The [Cadac Organice Product Suite](#) offers solutions for engineering document management and document control and is entirely based on Microsoft SharePoint. Leveraging SharePoint as the platform for Enterprise Content Management and Collaboration, Cadac Organice is especially suitable for project-driven engineering industries like the [mining industry](#). Over the years, it has been implemented worldwide by several mining companies, mining projects and suppliers to the mining industry. Examples are Exxarro, Newcrest Mining, [Koniambo Nickel SAS](#) (a joint venture between the government of New Caledonia and Xstrata Nickel and executed by Hatch and Technip), and [Sinclair Knight Merz](#), providing engineering consulting services to the mining industry.

A SharePoint framework for the mining industry

Based on their experience with these companies, Cadac Organice has developed a SharePoint framework to manage all operational documents in mining projects, such as engineering (CAD), quality, regulatory, specifications, and vendor documents, procedures, policies and external communications. The SharePoint document and content structure, as well as predefined libraries and lists, content and document types, metadata fields and values are aligned with policies and working methods in the mining

industry. The framework gives mining companies a head start in using SharePoint and Cadac Organice for the engineering document management and document control needs.

Part of Cadac Organice Explorer

The SharePoint mining framework is part of [Cadac Organice Explorer](#) (a smart client for Microsoft SharePoint and enhancing SharePoint with functionality for engineering document management), and available from May 1st, 2011.

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Cadence Announces Breakthrough in System Development to Meet Demands of ‘App-driven’ Electronics

3 May 2011

Cadence Design Systems, Inc. announced a breakthrough in electronic design with a new suite of products that promises to cut system integration time by up to half for next-generation designs. Bringing hardware and software development closer together than ever before, the suite features four connected platforms that enable hardware-software co-design from architectural-level development through to prototyping.

“The acceleration of design complexity is even faster than we predicted a year ago, when we first discussed the disruptive transformation happening in system design,” said John Bruggeman, senior vice president and CMO, Cadence. “Product development cycles are shrinking to as little as six months, putting undue pressure on design teams who must work 24/7 to deliver competitive systems – and even then there is a high risk that their designs won’t see the light of day. Our suite provides a level of connection between hardware and software that hasn’t existed until now and will not only enable the most efficient design methods possible, but will redefine the system design process moving forward.”

Four Essential Platforms for System Development

The [Cadence System Development Suite](#) features two new products—the Cadence Rapid Prototyping Platform and the Cadence Virtual System Platform—and connects them to the Cadence Palladium® XP Verification Computing Platform and Cadence Incisive® Verification Platform. The suite implements an integrated flow with a common environment that enables system engineers to migrate quickly from one development phase to another.

“The Cadence System Development Suite is an industry first, providing a development continuum that enables engineers to have a seamless migration path through the design phases,” said Nimish Modi, senior vice president for the System and Software Realization Group at Cadence. “This integrated flow embodies the open, connected and scalable tenets of our approach to System Realization and provides a significant breakthrough in addressing the challenges of early software development and hardware/software convergence, leading to a dramatic reduction in development schedules.”

Smooth Migration from Emulation to FPGA-based Prototyping

The Cadence Rapid Prototyping Platform includes off-the-shelf FPGA boards with capacities of up to 30 million ASIC gates, supports standard ASIC flows and provides fast design mapping, multi-FPGA automatic partitioning and FPGA place & route tools. Its unified environment with the Cadence Verification Computing Platform enables the fast and smooth migration of designs from emulation to FPGA-based prototyping. It delivers high-performance and affordable replicates for early software

development and for running exhaustive regression tests while leveraging and sharing the fast bring-up times, superior debug capabilities and comprehensive SpeedBridge® adapters' portfolio of the Cadence Verification Computing Platform.

Multiple Views of Hardware, Software, Memories and Registers

The Cadence Virtual System Platform is a software development platform built on top of abstracted hardware models, approaching real-time speeds. It delivers an integrated and fully synchronized multi-core hardware software debug environment, with multiple views of hardware, software, memories and registers enabling system analysis and tight handshake between hardware and software teams.

Combined with the Cadence Incisive Verification Platform, it delivers mixed TLM/RTL unified simulation and common metric-driven verification methodology, reducing the risk of discrepancies between the abstracted hardware model and the eventual RTL. Finally, it accelerates the process of platform creation through automation by enabling customers to build highly configurable transaction-level non-processors hardware models and utilize high-performance processor models delivered by ARM and other third parties.

Introduced at industry events in Silicon Valley and Munich, Germany, the Cadence System Development Suite is a great leap forward in Cadence System Realization technology, delivering against the [EDA360 vision](#), which cites the need for greater technology integration—bridging silicon, SoC and system—to maximize profits.

“We have used Cadence emulation products for many years, including the Cadence Verification Computing Platform, for system validation on our most important projects, such as NVIDIA Tegra processors,” said Narendra Konda, director of engineering at NVIDIA. “But with increased software content and multi-core designs, today’s electronics systems have become substantially more complex and require a more robust set of technologies to meet time to market and ensure quality. Accordingly, we have deployed the broader Cadence System Development Suite, with elements such as the Cadence Rapid Prototyping Platform offering immediate incremental value.”

“In order to streamline the system development process of ARM-based designs, we have collaborated with Cadence extensively over the last 10 years. The new Cadence approach of delivering a single environment for virtual prototyping, emulation and FPGA-based prototyping is clearly a need for future complex designs,” said Joe Convey, director of Design Enablement at ARM. “Continuing our collaboration to link the Cadence System Development Suite with ARM IP will enable our mutual customers with a pathway to product success.”

The Cadence System Development Suite includes the Cadence Palladium XP Verification Computing Platform, Cadence Incisive® Verification Platform and Cadence Rapid Prototyping Platform, which are immediately available; and the Cadence Virtual System Platform, currently in use with early adopters and widely available later this year.

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CoreTech System Announced the Release of Moldex3D eXplorer 2011

27 April 2011

CoreTech System Co., Ltd. (Moldex3D) announced the new version of Moldex3D eXplorer. In consideration of CAD users' demand for a preliminary CAE solution, Moldex3D eXplorer is developed as a compact and easy-to-use injection molding simulation application, embedded in Creo Elements/Pro,

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NX, and SolidWorks. It allows industrial designers to perform a quick filling analysis for plastic part verification and provides complete filling results, such as melt front time, air trap, weld line, etc.

Moldex3D eXplorer 2011 brings the major enhancements as follows:

Surface display of various temperature results

Users are now able to visualize 3D temperature analysis results from surface distributions, including melt front temperature, maximum temperature, average temperature and frozen layer ratio. Armed with these informative surface results, users can better assess the molding process and part quality.

Variable Gate Size

Users are able to setup appropriate gate size and verify its effect on the filling patterns of part designs.

Traceable Analysis History

This new function records every analysis result of a part automatically. As a result, users can compare the filling results of different process conditions and acquire a better simulation solution.

Save Your Projects in Selected Folders

Simulation projects can now be saved to the folders specified by users for the later use.

"Moldex3D eXplorer is a solution for quick part verification. It brings higher accessibility for CAD designers to enhance their design productivity and efficiency. With reference to users' experience in the previous version, Moldex3D eXplorer 2011 further adds the features to improve utilization and friendliness," said Dr. Venny Yang, President of CoreTech Systemn Co., Ltd. By providing new functions in Moldex3D eXplorer 2011, designers are expected to create higher value in the product development process.

Moldex3D eXplorer 2011 is now available for Creo Elements/Pro, NX, and SolidWorks. For pricing and detailed product information, please contact our local offices and resellers. Further technical information also can be found at <http://www.moldex3d.com>.

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Delcam Offers New Modules for \$149 CAD/CAM Software

4 May 2011

Delcam has introduced ten new modules for ArtCAM Express, the company's \$149 software for engraving, signmaking and woodworking. These will allow users to upgrade their capabilities to match their specific needs at a lower cost than would be required to move to the more powerful ArtCAM Insignia or ArtCAM Pro programs.

Three options are available to add design functionality and six to increase the machining options, with the tenth module allowing the import of data from a range of high-end CAD formats, including IGES and STEP. Full details and trial versions are available at <http://www.artcamexpress.com>.

The most popular design option is expected to be the vector tools module. This enables users to work with multiple layers and so makes the management much easier of complex designs made up from a number of different elements. Other tools in the module can be used to prepare data for machining, by splining and arc fitting the vectors to make the toolpaths more efficient.

A similar module is available to allow multiple bitmap images to be placed on separate layers. Again,

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individual layers can be displayed or hidden to make it easier to create and manage more complex designs.

The third design option allows users to create their own text fonts and add them to the library of standard fonts supplied with the software.

On the machining side, the nesting option gives more efficient use of material by allowing shapes to be oriented as closely together as possible.

The advanced machining module offers the ability to use multiple tools for rest machining during area clearance, toolpath ordering to minimise air moves, and multiple 3D bridges to hold the shapes while profiling, plus better control over lead moves to reduce dwell marks.

Companies using ArtCAM Express for engraving will be able to add the smart engraving module to clear away material more rapidly and leave a clean, crisp edge on items like engraved signs and foil-stamping tools. The same customers will also benefit from the raised round option that can effectively create a 3D shape from 2D vectors. As well as giving a more versatile appearance, this approach can be used to prevent material from ripping when foiling or embossing.

The texture toolpath module allows patterns and textures to be added to part or all of a design. Toolpath templates can be created to copy patterns, for example the effect of a hand-carved finish, over multiple items.

Finally, the feature machining module allows shapes or text to be added to a curved surface. This surface can be taken from the library of 3D clip art provided with the module or imported from the more advanced versions of ArtCAM.

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Eagle Point Software Corporation Announces 2012 Updates to Its Autodesk Revit Companion Solutions

5 May 2011

Eagle Point Software Corporation announced the release of the 2012 versions of Siteworks for Revit and LANDCADD for Revit. Updates to these solutions take advantage of new functionality in Autodesk Revit 2012 software supporting a more complete building information modeling (BIM) workflow.

Siteworks for Revit enables architects, designers and planners to shape the terrain for their building sites using grading tools to model pads, parking lots, streets, sidewalks and retaining walls – all within the Revit environment. Siteworks is intended to help these professionals convey preliminary design intent about the building site within the Revit model to help facilitate their collaboration with civil engineers. And because Siteworks runs inside of Revit and uses native families, components and toposurfaces, designs become part of the overall Building Information Model and help with visualizing the conceptual building plans.

LANDCADD for Revit allows architects and designers to improve team collaboration by providing functionality to lay out and model the landscape components of a project, allowing teams to make decisions earlier, reduce costly revisions, and speed the design process within the Autodesk Revit family of products.

Autodesk Revit Architecture 2012 enables users to create material appearance libraries to help standardize materials across projects and improve collaboration within the project team. Visualization

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enhancements give users the ability to display edges with more realistic views and shadows in consistent colors mode.

For more information on Siteworks for Revit or LANDCADD for Revit, please visit <http://www.eaglepoint.com>, contact Eagle Point at 1-800-678-6565, or contact your Autodesk reseller.

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Geometric Releases DFMPRO Version 3.0 for Creo Elements/Pro®

4 May 2011

[Geometric Limited](#) announced the release of version 3.0 of DFMPRO for Creo Elements/Pro®. Designers working with assemblies have to repeatedly check clearances between sets of components, which can be extremely difficult and time consuming. Users not only need global clearances but also require clearance checks between specific component pairs. A lot of time is spent in performing such clearance checks and again in reviews to reduce possibilities of human errors.

The new release of [DFMPRO](#) helps to define the clearance requirements as rules which can be easily specified for individual as well as a set of components. Checking of complex assemblies becomes easy at just a click of a button. The analysis results can also be exported and shared with other users. This drastically reduces checking time from days to hours and ensure adherence to nominal clearance specifications.

“Many of our industrial, consumer electronics, automotive, heavy engineering and aerospace customers have stated their requirements for checking specific clearances between various components. It is important to maintain minimum clearance between components or parts during assembly to meet high temperature, high voltage and other such operating conditions. DFMPRO helps to easily specify clearance requirements around capacitors, between heat sinks and casings, from harnesses to nearby components and many others”, said Rahul Rajadhyaksha, Product Manager DFMPRO.

Another new feature is the hole-alignment check. This is a simple yet powerful functionality, as checking hole-alignment visually is a tedious process.

For online demo or to know more about the product, please write to dfmpro.marketing@geometricglobal.com

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Lattice Technology Announces Membership in the JT Open Program

4 May 2011

Lattice Technology® Inc. has become a Vendor Member in the JT Open Program, and is announcing support for the 3D JTDM data format.

"JT has been widely accepted within the industry as a flexible, reliable, and viewable 3D data format," said Bill Barnes, Lattice Technology, Inc. General Manager, "By adding JT support to our Lattice Technology XVL solutions, we are able to extend the lightweight 3D utilization solutions based on JT. Those solutions, including design review, process planning and technical communications, will further enhance the value of JT to users wishing to re-use JT data in design and manufacturing processes."

Lattice Technology's XVL Technical Collaboration and Illustration solutions enable easy use of existing

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3D JT data representing individual parts or large assemblies to create high quality technical illustrations, stunning images and easy to understand animations for use in any type of technical document such as parts catalogs, service documentation, manufacturing instructions, supplier communications, etc.

Using Lattice Technology's XVL documentation solutions, JT data can be embedded as XVL data in interactive 3D Excel spreadsheets that also contain list data such as work instructions, assembly processes, parts lists, and other manufacturing data. Users can enhance their work performance and productivity by exploiting the interactivity of the data - click on a listed part and the related 3D part will be highlighted and can be viewed, rotated, cross-sectioned, measured and so on. Click on a work process or instruction and the 3D animation related to that process will be shown. Customers using Lattice Technology solutions have experienced significant improvements in assembly processes on the shop floor, parts ordering accuracy and learning of new maintenance processes.

Lattice Technology XVL digital mock up solutions deliver enhanced levels of functionality for process design, digital mock up, checking and visualization of 3D data. Now, JT users can employ the industry's most accurate compression technology using XVL® with Ultra Large Data Handling (ULDH) technology that makes it even easier to check, visualize and verify the accuracy of very large assemblies, create and test processes and to document those processes for downstream users.

About JT and JT Open

Developed by Siemens PLM Software, JT is supported by the JT Open Program, a global initiative, established by Siemens PLM Software at the request of its customers, to promote the development and proliferation of JT as the common 3D language for PLM. The JT File Format Reference document is the world's first ISO publication for 3D visualization in the PLM domain, and the formal process to establish the JT data format itself as an ISO standard has been initiated.

Additional information about JT Open can be found at <http://www.jtopen.com>.

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Mentor Graphics Announces FloEFD for Siemens NX Product for Fully-integrated and Seamless Concurrent CFD Simulation

4 May 2011

Mentor Graphics Corporation announced the new FloEFD for Siemens NX product for concurrent computational fluid dynamics (CFD) simulation, seamlessly integrated with the Siemens NX product lifecycle management (PLM) software. Unlike other NX-based tools available today, the FloEFD for Siemens NX software from Mentor Graphics® works directly with native NX geometry using Finite Volume mathematical techniques for more robust and faster simulations, while supporting a wider range of applications. Inherent and easy-to-use technologies found in the FloEFD product offer unparalleled usability, making it ideal not only for specialist CFD analysts but also for multi-tasking engineers and designers.

The FloEFD for Siemens NX product uses a unique hexahedral immersed boundary meshing approach for more accurate and computationally efficient simulations compared to tetrahedral and prismatic elements found in other tools. As a result, the FloEFD software can support a full range of physical simulation capabilities: highly turbulent flow fields, compressible flows, combustion and cavity modelling. These capabilities in the FloEFD product will be demonstrated at PLM World, taking place May 2-4, 2011 in Las Vegas, Nevada, Mentor Graphics booth #27.

Concurrent CFD for Advanced Productivity and Reliability

Mentor Graphics Concurrent CFD methodology can reduce simulation time by as much as 65 to 75 percent compared to traditional CFD tools. It enables users to optimize product performance and reliability while reducing physical prototyping and development costs without time or material penalties. By using the same geometries and a common user interface (UI), graphics window, and workflow for CAD and analysis, designers using Siemens NX and FloEFD software can maintain a single set of data across the entire project design process.

The FloEFD product is an established technology supported by a dedicated CFD development team. Mentor Graphics is the world's third largest general purpose CFD provider with the largest knowledge base in electronics cooling—a key resource for Siemens NX customers.

"We anticipate that because FloEFD is embedded in the NX CAD-interface it will benefit our design group by minimizing design-to-analysis time," stated Mike Dunn, lab manager at Hutchinson SSI. "This product has the potential to utilize design enhancements made during the analysis to save us three days or more in our current process, making us more productive while improving overall design quality."

"We are pleased to announce another concurrent CFD solution with FloEFD for Siemens NX users," said Erich Buerger, general manager of Mentor Graphics Mechanical Analysis Division. "With this edition we further enhance our current offerings of easy-to-use, yet powerful, CFD to meet the requirements of a larger community who would like to take advantage of Concurrent CFD."

For more information on Mentor Graphics FloEFD for Siemens NX technology and other products from Mentor's Mechanical Analysis Division, visit the company website at

<http://www.mentor.com/mechanical>.



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Mentor Graphics Announces New Integrated Development Environment Based on the GNU Toolchain

3 May 2011

Mentor Graphics Corporation announced the Mentor® Embedded Sourcery™ CodeBench product, a next-generation integrated development environment (IDE) based on the open source GNU toolchain. The Sourcery CodeBench technology provides embedded developers with a tool suite for developing and optimizing systems based on a broad range of devices from the most advanced microprocessors to microcontrollers.

"The Mentor Embedded Sourcery CodeBench GNU toolchain provides a valuable development ecosystem for our industry-leading multi-core, multi-threaded processors, including our XLP processor family," said Chris O'Reilly, vice president of marketing at NetLogic Microsystems. "Our customers benefit from time-to-market and cost savings by using Mentor's open source tools to quickly optimize their devices for tomorrow's innovative systems."

The Sourcery CodeBench product incorporates technologies which Mentor acquired from Code Sourcery in November 2010. The Sourcery CodeBench tool introduces new support for the NetLogic Microsystems XLP multi-core processor, Freescale Kinetis, and Xilinx Zynq. The Sourcery CodeBench product is integrated with the Mentor Embedded Sourcery Probes and third-party probes.

The comprehensive Sourcery CodeBench tool suite comprises an IDE based on Eclipse, the Eclipse

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C/C++ development tools and compilers, and GNU toolchain, including an assembler, linker, runtime libraries, and source-level and assembly-level debuggers. Containing all of the tools needed to build and debug embedded applications, the Sourcery CodeBench product is integrated with the Sourcery Probe family and, in addition to the new architectures listed above, supports AMD64, ARM XScale, Freescale ColdFire, Power Architecture, Intel IA32 and EM64T, MIPS, SPARC and Texas Instruments Stellaris processors.

Visualization of System Bottlenecks with Sourcery System Analyzer

The Sourcery CodeBench IDE includes the new Mentor® Embedded Sourcery System Analyzer technology, a specialized tool that helps embedded developers to visualize and analyze system data. By allowing embedded developers to understand the performance characteristics of an application or a complete system, Sourcery System Analyzer can locate bottlenecks so the embedded developer can debug or decode these problem areas easily and improve design performance. Execution data is collected from several sources including the Linux® and Nucleus® operating systems. The Linux Trace Toolkit (LTTng) provides a broad view of Linux behavior in operation to gain insight on how the resources and processors are being used. The Sourcery System Analyzer product is capable of working with large datasets, integrating and correlating multiple sets of information and creating compelling visualizations.

The Sourcery System Analyzer tool allows the user to manually apply trace point placements anywhere in the application to identify the start and end (and points in-between) of a critical section of code that the developer wants to explore. The user trace points can then be displayed and manipulated with the Sourcery System Analyzer product to identify and fix problems.

“Our new Sourcery CodeBench environment takes powerful technology from open source, extends it, and makes it easy for developers to use,” said Glenn Perry, general manager, Mentor Graphics Embedded Software Division. “This product tracks with our strategy to increase the availability of open source-based products and services for the larger embedded community in order for them to better compete in fast moving markets.”

Product Availability and Pricing

The Mentor Embedded Sourcery CodeBench Personal Edition is available starting at \$199 (USD). The Professional Version with System Analyzer is available starting at \$2,799 (USD). For more information on Mentor Embedded Sourcery CodeBench, visit <http://go.mentor.com/codebench>.

The Mentor Graphics Embedded Software Division comprises the Mentor Embedded family of products and services, including embedded software intellectual property (IP), tools, and professional consultant services to help embedded developers and silicon partners optimize their products for design and cost efficiency. The Mentor Embedded team continues to lead the industry with involvement in the open source community and in innovations such as Android beyond mobile handsets, 2D and 3D UI development, open source tools, and multi-OS on multicore architectures. More information on the Mentor Embedded products and services can be found at www.mentor.com/embedded.

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Mentor Graphics Partners with TSMC to Validate Advanced Functional Verification Technology

4 May 2011

Mentor Graphics Corporation announced it has worked with TSMC to validate an advanced functional

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verification approach based on the Mentor Graphics® Questa® Ultra verification platform. The Questa Ultra verification platform supports a process to accelerate design verification from TLM to RTL to chip implementation. As a result, it helps users adopt productive verification technologies for complex designs. The Questa Ultra verification platform integrates simulation with technology to address intelligent testbench automation, low power verification and verification management. The Questa Ultra verification platform is also tightly integrated with specialized technology for clock domain crossing (CDC) verification and formal verification to cover hard to reach design problems.

“Design verification complexity is a major barrier to reach coverage closure. Reducing overall design cycle time is a common goal for the semiconductor industry,” said Suk Lee, director of Design Infrastructure Marketing at TSMC. “Our collaboration with Mentor Graphics on Questa Ultra verification platform is an important step to address the time-to-coverage challenges that customers are facing today especially in pattern generation.”

The Mentor Graphics functional verification environment delivers a strong verification foundation and vision, spanning simulation, emulation, and formal verification to address ever-growing verification challenges. Its leading support for open, industry standards, customizability, and scalability ensures an optimized verification flow that achieves the highest productivity, schedule predictability, and rapid verification closure.

“Collaboration between Mentor and TSMC is fundamental to drive verification productivity and efficiency. We have taken big steps to validate adoption of innovative verification technology within standard verification methodologies and languages with the TSMC partnership,” said John Lenyo, general manager of Design Verification Technology division at Mentor Graphics. “This partnership with TSMC is further evidence of our commitment to transform functional verification of complex SoC designs.”

Readiness of the Questa Ultra verification platform is confirmed for designs destined for production by TSMC through mutual customer validation. “AppliedMicro always evaluates tools that make tough design verification challenges easier. The Mentor Graphics collaboration with TSMC results in verification technology that is user friendly and draws on a comprehensive tool set in a standard methodology framework,” said Shing Sheung Tse, senior engineering manager at AppliedMicro. “The technology offers the ability to employ advanced techniques and to manage overall coverage metrics for low-power design verification. The Intelligent Testbench Automation capability shortens our time-to-coverage by over 100x. This feature-rich solution helps design teams consolidate tasks, reduce time-to-market and introduce advanced embedded processing for high-speed transport products.”

Availability

The Mentor Graphics Questa Ultra verification platform and associated technology validated with TSMC are available immediately. Questa Ultra includes support of the popular Open Verification Methodology (OVM) and Universal Verification Methodology (UVM). More information about the advanced verification technology can be found at <http://www.mentor.com/products/fv/>.



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Oracle Introduces Oracle® Argus Safety 7.0

4 May 2011

News Facts

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- Supporting health sciences organizations' commitment to ensuring the safety and effectiveness of their products, Oracle announced the availability of [Oracle® Argus Safety 7.0](#), an integrated global adverse events (AE) management and regulatory reporting solution.
- From a single instance of the solution, the newest release enables health sciences organizations and contract research organizations (CROs) to maintain separation among and securely manage safety data from firms across the complex network of customers and business partners required for product development in the health sciences industry.
- This innovative approach eliminates the operational requirements and IT costs associated with setting up and managing several instances of a traditional safety solution in an enterprise, while maintaining stringent security controls and facilitating compliance with [U.S. Food & Drug Administration \(FDA\) 21 CFR Part 11](#) electronic record and signature requirements.
- To deliver even greater efficiency, Oracle Argus Safety 7.0 also features new capabilities, such as standardized configurations and rules management, as well as centralized coding-dictionary management, all of which enable rapid set up and maintenance of new safety datasets, regardless of their source. In addition, the solution reduces the resources required for ongoing maintenance through a single, global user management and administration tool.
- With its new extensible portal, Oracle Health Sciences Argus Safety 7.0 also helps organizations establish and manage organizational safety priorities appropriately across all products and stakeholders from a single interface. The solution's role-based workflows and work lists help ensure that users are aware of overall priorities and focused on the most critical events.
- Oracle Argus Safety 7.0 is part of Oracle's set of comprehensive solutions to manage pharmacovigilance, signal detection and proactive risk management across the product lifecycle.

Supporting Quotes

- "Product development in the health sciences industry is increasingly virtualized and complex, often spanning the globe and requiring the management of safety data from numerous co-marketing, in-licensing, and partner entities," said Neil de Crescenzo, senior vice president and general manager, Oracle Health Sciences. "Health sciences enterprises and their partners seek secure and efficient ways to manage this data across partners. Oracle Health Sciences Argus Safety 7.0 answers this call, enabling organizations to manage multiple datasets in a single instance while meeting 21 CFR Part 11 requirements. The end result is the ability to lower IT costs and reduce management and compliance complexity."
- "Developing version 7 of the Argus Safety product with Oracle has allowed Quintiles to establish a first for the life sciences industry -- offering a validated end to end lifecycle safety solution which is available entirely as a cloud based platform -- simple, intuitive and quick to deploy," said Richard Thomas, chief information officer, [Quintiles](#). "With Version 7, whole new levels of efficiency and integration are possible."

Supporting Resources

- [Oracle in Health Sciences](#)
- [Data Sheet: Oracle Argus Safety 7.0](#)

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SAP Makes Collaboration Core to Business Applications

4 May 2011

Delivering on its strategy to bring collaborative capabilities to every application and facet of work, [SAP AG](#) announced that the cloud-based collaborative application [SAP® StreamWork™](#) is now available to integrate with SAP business software. SAP enables individuals, teams and entire organizations to better collectively problem-solve, brainstorm and make decisions directly within their business applications and with the information they know and use every day — without switching to another disconnected collaboration solution or having to rely on mountains of email to drive projects forward.

Since the [launch](#) of SAP StreamWork and the addition of advanced security and integration capabilities in the [enterprise edition](#) of the product, it has been used by people in thousands of cities around the world. Building upon this momentum, the new integration capabilities expand its reach even further so that all types of people — employees, clients, partners and suppliers — can have the opportunity to benefit from secure social collaboration in the context of their work. For IT, SAP StreamWork delivers a secure, social solution that companies can standardize on across complex landscapes with many applications, eliminating the management of multiple collaborative solutions with differing technology and security capabilities.

SAP and partners have already delivered integrations with SAP StreamWork, and additional integrations are in development. SAP StreamWork can be integrated easily into SAP applications with the help of a consultant, SAP partner or by a customer's own IT department.

SAP StreamWork, enterprise edition, now offers integration with several SAP applications, including the [SAP® Customer Relationship Management \(SAP CRM\)](#) application for social CRM, enabling sales leaders to bring teams together — sales, customer service, consultants and more — to help close sales opportunities more quickly. Sales teams can also collaborate directly with their customers to help ensure the products and services are delivered when expected and to help address the requirements defined.

Other integrations for SAP StreamWork have already been delivered for the [SAP® Product Lifecycle Management \(SAP PLM\)](#) application, helping drive product ideation and uncovering insights to bring innovative, differentiated products and services to market, as well as the [SAP® BusinessObjects™ Strategy Management](#) application, helping companies become more productive, agile and risk-aware by collaborating and defining key performance indicators (KPIs) across the organization. Additionally, SAP is currently planning for the integration of SAP StreamWork with the [SAP® BusinessObjects™ Business Intelligence \(BI\)](#) platform, which would give customers the ability to deliver collaborative BI throughout their organizations, giving end-users the freedom to data hypothesize, analyze and make fast, informed decisions with the team.

"More and more our customers ask us how they can use collaboration strategically in their businesses," said Jack Miller, global vice president, Global Collaboration and Cloud Analytics, SAP. "With SAP StreamWork, we've delivered a contextually-relevant approach that's easy for business people to learn and use within their current processes, while at the same time serving the security and flexible management needs of IT."

SAP StreamWork is currently available in enterprise, professional or basic editions. For more information, visit the [Business Analytics newsroom](#). Follow SAP BusinessObjects on Twitter at [@businessobjects](#) and SAP StreamWork at [@sapstreamwork](#).

Next Major Event: SAPHIRE® NOW Conference

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With SAPPHIRE® NOW, SAP offers customers, partners and prospects even more opportunities to engage in dialogue with peers, participants and thought leaders at the premier educational and networking event. Being held in Orlando, Florida, May 15-18, 2011, the SAP customer conference connects attendees on site with global participants through state-of-the-art broadcast studios and an online experience that incorporates the latest social media and community functionality. Whether on site or online, participants can gain insight as to how SAP is delivering on its product strategy and helping organizations around the world to run better. For more information, visit www.sapphireNOW.com. For announcements, blog posts, videos and other coverage leading up to and during the event, visit the SAPPHIRE NOW newsroom at www.sapphireNOW.news-sap.com. Follow SAPPHIRE NOW on Twitter at [@SAPPHIRENOW](https://twitter.com/SAPPHIRENOW).

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Siemens PLM Software Delivers Parasolid V23.1, Continuing Focus on Application Developer and End User Productivity

5 May 2011

Siemens PLM Software announced the latest release of Parasolid® software. The enhancements in Parasolid Version 23.1 (V23.1) continue Siemens PLM Software's emphasis on increasing productivity for the independent software developers (ISVs) creating applications based on Parasolid, and their end user customers.

“By listening to our ISV customers and diligently addressing their requirements, without ever losing sight of the needs of the end user, we have been able to maintain impressive growth and success for the family of solutions based on Parasolid,” said Joan Hirsch, vice president of Product Design Solutions, Siemens PLM Software. “Parasolid V23.1 maintains that approach with productivity improvements for application developers that include functional enhancements in the areas of CAE support, interoperability and modeling.”

CAE Support

Targeting the significant Parasolid computer-aided engineering (CAE) user community, Parasolid V23.1 includes new enhancements to its robust sheet modeling technology.

Neutral sheets may now be created from multiple faces in a single operation with control over how sheets are extended to create a valid solution and how holes in resulting neutral sheets are filled.

Wire bodies and sheet bodies can now be united together using Boolean operations facilitating more flexible workflows.

Enhancements to the faceting capability include additional mapping of facet topology to the model topology of the part from which the facets were created, simplifying the process of establishing the relationship between the facets and the model when performing analysis.

Interoperability

As the geometric modeling component – or kernel – of choice in many of the world's leading CAD, CAM and CAE applications, Parasolid is often required to work with imported data from other systems that require various levels of geometry and topology repair. Parasolid V23.1 includes several new functions in this area.

A new function helps create the topology of a body when importing boundary representation data into

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Parasolid. This provides more diagnostic information to the calling-application that can be used to fine-tune the import process.

A new function uses different methods, under the control of the calling-application, to streamline the attachment of geometry to edges during the data import process.

Two new functions are added to find and repair degeneracies in surface data imported from other systems. This helps eliminate the problems caused by degeneracies, such as self-intersections, that can disrupt modeling operations performed at the higher precision used by Parasolid.

Improvements in sheet body thickening automatically detect and repair degeneracies in the input bodies. Further improvements automatically repair self-intersections that may arise when thickening a sheet with tightly-curved areas by more than its radius of curvature.

Application Support

Several enhancements have also been made to improve the productivity of developers integrating Parasolid into a new or existing application, including the two enhancements highlighted below.

Imprinting - A new API is provided with a revised options structure and tracking information to improve application management of imprinted entities.

Groups - A new system attribute is provided to specify the behavior of empty groups when the owning parts are split or merged to provide applications with greater flexibility when managing groups.

Modeling Enhancements and Availability

Parasolid V23.1 also includes a large number of additional enhancements as well as significant extensions to the breadth and depth of functionality in the areas of blending, local operations and surfacing. Parasolid V23.1 is available immediately.

About Siemens PLM Components; Parasolid and D-Cubed

PLM Components are software tools that support innovation and promote interoperability in CAD, CAM, CAE and PLM applications. Siemens PLM Software develops these components, uses them throughout its own applications and licenses them to independent software vendors and end-user organizations. PLM Components include the Parasolid and D-Cubed™ software products, technologies that provide 3D part and assembly modeling, editing and interoperability, 2D/3D parametric sketching, motion simulation, collision detection, clearance measurement and visualization functionality.

Applications include mechanical CAD, CAM, CAE, mold design, sheet metal, AEC, GIS, structural, plant and ship design, CMM, reverse engineering and sales configuration. For more information, please visit <http://www.siemens.com/plm/open>

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Siemens PLM Software Partners with Cortona3D to Deliver Complete PLM-Based 3D Technical Publishing Solution

2 May 2011

[Siemens PLM Software](#) announced a partnership with Cortona3D that enables the company to deliver a comprehensive PLM-based 3D technical publishing solution fully integrated with its [Teamcenter® software](#). Siemens PLM Software now has the ability to sell the Cortona3D RapidAuthor software solutions and Teamcenter Integration software directly to its customers, providing a world-class

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methodology – managed within an integrated product development process – for more efficiently producing higher quality technical documentation at a lower cost.

“The Cortona3D RapidAuthor suite is the perfect complement to the content and document management capabilities of Teamcenter,” said Steve Bashada, vice president of Teamcenter Applications, Siemens PLM Software. “We now have the ability to offer our customers a fully integrated and comprehensive set of tools to author, publish and manage all their product support documents concurrently with the rest of the product development process. And since Teamcenter is the digital backbone for all product and process data, including 3D CAD and lightweight visualization files, our customers can produce technical documentation faster, more accurately and with richer 3D content than ever before.”

Concurrent document development enhances speed, accuracy, content

The production of product related documentation and training material often takes place as a separate function outside of product design and development. However, much of the information necessary to create this documentation comes from product development and is subject to rapid change. As a result, documentation is often produced very late in the product development process and is subject to errors and incomplete content due to disconnected systems and processes.

The integration of Teamcenter with Cortona3D RapidAuthor, places documentation authoring, illustration and publishing within the same PLM environment as product development to align publication activities with product processes and information. The capture of Teamcenter product data within Cortona3D RapidAuthor provides automated links between 2D and 3D illustrations and structured text, providing interactive documentation. By connecting the product and document development processes, companies can perform both functions simultaneously with richer interactive content, higher quality and increased productivity. As the product changes its documentation is also updated, enhancing the speed, accuracy and content of product related documents. This integrated solution enables engineers and technical writers to create structured technical documents such as product catalogs, manuals and training material for publication online or in print, and aligned with product launch activities.

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SolidWorks 3DVIA Composer Breaks Down Communication Barriers

3 May 2011

As product development grows more global and decentralized, [3DVIA Composer](#) technical communication software from Dassault Systèmes SolidWorks Corp., enables design teams to overcome language and knowledge barriers while reducing costs and production time.

Design that Matters, a non-profit product design group, used 3DVIA Composer to develop high-quality visuals of a phototherapy device to treat jaundiced infants in developing countries. The images enabled the design team to gather feedback from, and gain acceptance by physicians in Vietnam, where it would initially be produced and used in hospitals that may not be able to afford traditional western machines.

“We are dealing with a different language, culture, and financial understanding,” said Will Harris, a product designer with Design that Matters. “The only way to overcome these barriers is visually. A photorealistic rendering is the next best thing to putting the device in their hands, and with 3DVIA Composer, they can see how the device goes together. These visualization tools were critical to the success of the project.”

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The newest version of [3DVIA Composer, V6R2011x](#), transforms 3D CAD data into high quality image or animated visual assets for use in product communication deliverables. New features enable users to create lifelike images with precise detailing. Companies in industries as diverse as industrial equipment, marine engineering, and consumer retail, use 3DVIA Composer to cut up to 80 percent from production time for documents such as user manuals, assembly instructions, and marketing materials. Among the benefits users gain from 3DVIA Composer are:

Lifelike detail through new features such as alpha channel support, ambient occlusion, per-pixel lighting and depth-of-field functionality.

[Cardiovascular Systems Inc.](#), a developer of treatment systems for vascular disease, can show how parts relate to assembly fixtures and how to use a range of custom-designed tools. 3DVIA Composer also contributed to a 25 percent cut in assembly training time at the St. Paul, Minn.-based company.

Faster turnaround time by creating images in parallel with product design. Allmand Brothers Inc., a Nebraska-based company that designs and manufactures light towers and stands, compact loader backhoes and industrial heaters, cut the time required to produce a manual for a complex assembly from a month to a week.

Higher productivity and efficiency from streamlined document production processes.

Sweden's [Produktställ AB](#) used 3DVIA Composer to improve documentation production efficiency by 70-80 percent, freeing resources to support the company's sales presentation needs.

“With 3DVIA Composer, users can overcome barriers to communicating design information to stakeholders in the design process – other members of the design team, customers, partners, or vendors,” said Kishore Boyalakuntla, director, product management at DS SolidWorks. “3DVIA Composer enables users to create visual assets that communicate exactly what they need to see, and with the software’s latest enhancements, they don’t have to worry about errors in documentation.”

Availability and pricing

3DVIA Composer V6R2011x is available worldwide through SolidWorks VARs. Contact a local SolidWorks VAR for pricing. To locate one in your region, visit <http://www.solidworks.com/locateVAR/>.



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SpringSoft's Verdi Debug Software Expands Verification Interoperability with Comprehensive UVM Support

2 May 2011

SpringSoft, Inc. announced comprehensive support for the Universal Verification Methodology (UVM) with its Verdi™ Automated Debug System. The Verdi software adds UVM source code and new transaction recording capabilities to its existing HDL debug platform, making it easier for engineers to visualize and debug the complex SystemVerilog testbench structures required to test sophisticated system-on-chip (SoC) devices.

UVM is becoming an industry standard approach to ensuring the reusability and interoperability of testbench code (also referred to as verification IP) integrated from multiple sources or developed using different methodologies. The Verdi UVM capabilities are enabled within the system’s unified testbench and design debug environment for more efficient recording and viewing of transaction data beyond what

is supported by the current UVM infrastructure. With the ability to visualize a broader range of information between the testbench and design under test at the transaction level, Verdi users have a more complete picture of their environment, which is especially critical during detailed regression testing phases.

“Just as SystemVerilog provides a compelling advantage in addressing verification complexity, UVM provides the infrastructure for greater verification interoperability,” said Thomas Li, director of product marketing at SpringSoft. “Our UVM implementation combines the proven capabilities of Verdi with enhanced UVM transaction recording that extracts more information critical to debug. This gives engineers a more natural way to better understand and analyze testbench activities and determine whether problems originate in the testbench or the design.”

Enhanced UVM Implementation

[SpringSoft](#) implemented full UVM source code support with the industry standard SystemVerilog library. In addition, SpringSoft provides a custom SystemVerilog file in the Verdi system to transparently record all UVM transactions into the company’s defacto standard Fast Signal Database (FSDB) for a complete record of the traffic between testbench components. The transaction data can be used within the existing Verdi waveform tool or in a new Unified Modeling Language (UML)-based sequence diagram view. The automated mechanism eliminates the need for manual recording processes, such as the output of transactions as text messages and instrumentation of testbenches to print transactions into a text file.

The new UVM testbench debug capabilities utilize the feature-rich transaction-level infrastructure of the Verdi environment enabling engineers to debug both the testbench and design efficiently at post-simulation. Key features include a tabular spreadsheet view for highlighting and filtering of transactions, easy-to-use class browsers for navigating testbench hierarchy, and automated tracing through source code to identify the origin of testbench problems. As UVM use models continue to evolve and gain broad industry adoption, SpringSoft will extend its Verdi support with dynamic data dumping capabilities as well as more advanced automation to record different kinds of data and create additional views.

Pricing & Availability

The new UVM testbench debug and transaction-recording capabilities are immediately available with the latest release of the Verdi Automated Debug System. The Verdi software is list priced at US\$14,000 for a one-year subscription license.

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Synopsys and HHNEC Announce the Availability of Low Power Reference Flow 3.0

2 May 2011

Synopsys, Inc. and Shanghai Hua Hong NEC Electronics Company, Ltd (HHNEC), one of Mainland China’s leaders in the field of IC foundry service, announced the availability of the 130-nanometer (nm) reference flow, version 3.0. The reference flow, a result of collaboration between Synopsys and HHNEC, adds the Synopsys Eclipse™ Low Power Solution to previous reference flows available to designers. Designers have immediate access to an optimized path to HHNEC silicon at 130-nm, enabling them to meet their project and cost requirements.

Reference Flow 3.0 includes implementation and verification capabilities of Synopsys’ Galaxy™

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Implementation and Discovery™ Verification platforms to enable engineers to deploy advanced low power techniques. Capabilities added for reference flow 3.0 include Synopsys' Formality™ solution for low power equivalence checking, MVRC for static rule checking, Power Compiler™ tool for power optimization, and VCS™ with MVSIM for multi-voltage simulation.

The reference design flow was validated using HHNEC's in-house-developed cell library, SRAM, and IO Library for 130-nm. A full low power cell library from HHNEC is ready for customer use. The test chip used to validate the reference flow features a multi-supply and multi-voltage design.

"Hua Hong NEC's 130-nanometer non-volatile memory process requires a flow that addresses leakage power to meet our customers' need for power efficient designs," said Wang Nan, design service director at [HHNEC](#). "We worked closely with Synopsys to deliver a solution that enables mutual customers to leverage Synopsys's strength in low power design and our manufacturing expertise.

Availability

The HHNEC-Synopsys Reference Flow 3.0 is available now from HHNEC; for more information, please contact your HHNEC account manager (ds@hhnec.com).

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Synopsys' DesignWare SuperSpeed USB 3.0 xHCI Host Controller IP Receives USB-IF Certification

5 May 2011

Synopsys, Inc. announced that its [DesignWare® SuperSpeed USB 3.0 xHCI](#) (Extensible Host Controller Interface) IP has successfully passed the USB Implementers Forum (USB-IF) SuperSpeed USB certification. The xHCI specification provides a standardized method for SuperSpeed USB (USB 3.0) host controllers to communicate with the USB 3.0 software stack. To achieve certification, the IP must support the new U1 and U2 power modes as well as all four USB transfer speeds, including SuperSpeed (5.0 Gbps), Hi-Speed (480 Mbps), Full-Speed (12 Mbps) and Low-Speed USB (1.5 Mbps). Synopsys is the only USB IP provider with both certified SuperSpeed USB 3.0 Host and Device IP. The complete DesignWare SuperSpeed USB 3.0 IP solution offers a unified architecture, enabling designers to significantly lower integration risk by eliminating the requirement to manage two distinct USB 2.0 and USB 3.0 datapaths in their system-on-chip (SoC) designs. Optimized for small area and low-power, the DesignWare SuperSpeed USB 3.0 Host Controller is already in products that are in mass production. It is ideal for battery-powered, portable devices.

"Passing SuperSpeed USB certification is a crucial product milestone demonstrating that the Synopsys DesignWare IP meets the standards required for interoperability, which is a cornerstone for the mass adoption of USB," said Jeff Ravenscraft, USB-IF president and COO. "Synopsys' proper implementation of the U1 and U2 power saving modes will help extend the battery life in future USB products."

"As a leading developer of USB 3.0 software, it was critical that MCCI partner with Synopsys, a trusted IP provider, for the development of the MCCI USB 3.0 xHCI Datapump Host Stack," said Terry Moore, CEO of [MCCI](#). "Our close collaboration with Synopsys throughout the years has enabled us to create an interoperable USB 3.0 software platform that delivers fast SuperSpeed USB transfer speeds and full legacy support, while taking advantage of power savings from U1 and U2 modes. Whether in an embedded system, on Linux, or as a Windows driver, the MCCI software stack, combined with emulated FPGA hardware, allows developers to focus on system issues early in the development cycle."

"For the past 15 years, Synopsys has delivered high-quality USB IP solutions that have been integrated

in more than 2000 designs," said John Koeter, vice president of marketing for IP and Systems at Synopsys. "The DesignWare SuperSpeed 3.0 IP is a complete, market proven and certified solution consisting of DesignWare digital controllers, PHYs and verification IP. Combined with Synopsys' virtual prototyping and HAPS® FPGA-based prototyping solutions, Synopsys' certified USB IP products help designers lower integration risk and ensure interoperability with billions of USB-enabled devices."

Availability

The silicon-proven DesignWare SuperSpeed 3.0 USB Device, Host and Dual-Role Device Controllers are available now along with, verification IP, virtual prototype and drivers. The DesignWare SuperSpeed USB 3.0 PHY IP is available in leading 65-nanometer (nm) and 130-nm process technologies now, with support for 28-nm and 40-nm process technologies scheduled to be available in the first half of 2011. For more information on DesignWare USB IP, please visit: <http://www.synopsys.com/usb> or follow our blog at <http://www.synopsysoc.org/usb-blog>.

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With Rev 11, LMS Expands World-Class LMS Test.Lab Transfer Path Analysis Portfolio Fatigue Analysis and Composite Simulation

2 May 2011

LMS International offers a complete portfolio of transfer path analysis (TPA) solutions. Built on more than 30 years of continuous research and development work, LMS TPA methods are the problem-solvers of choice for noise and vibration engineers in the world's leading manufacturing industries – including practically every major automotive OEM.

“What the market appreciates is our hands on and comprehensive approach to transfer path analysis. We listen to our customers and help them implement the right techniques for the variety of noise and vibration problems they encounter. A top example in our TPA portfolio is our patented LMS Test.Lab OPAX technique. Using its wider frequency range for increased accuracy, engineers can quickly identify the root causes of noise and vibration issues faster than ever before. Plus the depth of our portfolio means that there is a TPA solution to tackle all kind of issues from every possible angle,” explained Bruno Massa, Vice-President, Test Division at LMS International.

In complicated structures with various sub-assemblies, such as cars, aircraft or ships, vibro-acoustic phenomena at a certain location may be caused by a remote vibration source. For example, the energy from a car engine is transmitted into the passenger cavity by a number of different routes: from the engine mounts, the exhaust system connection points and even indirectly via the drive shafts and the wheel suspension. These complex noise and vibration issues can be thoroughly examined using enhanced TPA techniques to help engineers detect root causes early in the design cycle. LMS Test.Lab provides a highly efficient solution to identify unwanted noise and vibration, trace it back to its origin, and quickly evaluate design improvements.

“As a systematic approach for any test-based engineering process, TPA is a valuable time-saving method that helps engineers set the right brand-critical noise and vibration performance targets on both the full system and component levels. With an optimized product development cycle, engineers actually ‘pre-design’ the ideal components to avert undesirable noise and vibration. On the other hand, TPA remains a popular method for troubleshooting existing vibro-acoustic issues, and is rapidly spreading from its core application area in automotive to other manufacturing industries, such as white goods,

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office equipment and even aviation and shipbuilding,” added Bruno Massa.

About the LMS TPA solution

A pioneer of transfer path analysis, LMS commercialized the first TPA product in the early 1990s under the LMS CADA-X platform. Today, this know-how is baked into the LMS Test.Lab solution. Various LMS Test.Lab modules include a wide range of dedicated TPA features including LMS Test.Lab Single Reference Transfer Path Analysis and LMS Test.Lab Airborne Source Quantification (ASQ); LMS Test.Lab Multi-reference Transfer Path Analysis; LMS Test.Lab OPAX and LMS Test.Lab Time Domain TPA. More information about these modules and the latest version of LMS Test.Lab, Rev 11, is available online: <http://www.lmsintl.com/testlab/transfer-path-analysis/introduction> and <http://www.lmsintl.com/testlab-rev11>.



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