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CIMdata News

Innovation in Medical Devices—From Starships to Biomicroelectronics to Cure Blindness

26 January 2016

CIMdata, Inc., the leading global PLM strategic management consulting and research firm announces that Damien C. Rodger, MD, PhD, Assistant Professor of Ophthalmology at the University of Southern California (USC) and Visiting Associate in Medical Engineering at the California Institute of Technology (Caltech), will kick-off PLM Road Map™ for the High Tech and Medical Device industries with a keynote presentation that will share recent innovative research into the use of parylene C, a USP class VI biocompatible polymer, as a structural material for biomedical devices.

Parylene C has been used for decades as a coating in biomedical devices however, recent research has focused on its use as a structural material for medical devices and not just as a coating. The goal has been to apply parylene to the field of ophthalmology, first as an ideal material for high-density retinal stimulation electrode arrays and radiofrequency power and data coils, as well as a packaging material, for intraocular retinal prostheses. Parylene has also been used as the main structural material for intraocular pressure sensors, glaucoma drainage devices, drug delivery devices, and now as a substrate for retinal pigment epithelium for the treatment of blinding eye diseases.

In his keynote address, *Innovation in Medical Devices—From Starships to Biomicroelectronics to Cure Blindness,*” Dr. Rodger will share his experiences on transforming these ideas from the design stage into microfabrication runs to testing. The presentation will additionally focus on the intellectual property and technology transfer process with a drive towards commercialization in the highly competitive academic setting.

While completing his bachelor’s degree in electrical engineering at Cornell University Dr. Rodger worked as a co-op intern at the NASA Jet Propulsion Laboratory on microsystems for unmanned space exploration. Dr. Rodger then earned his MD from the Keck School of Medicine at USC and his PhD in bioengineering from Caltech. He then completed his residency in ophthalmology at the USC Eye Institute/LAC+USC program and his fellowship in Vitreoretinal Diseases and Surgery at the USC Eye Institute for which he was awarded the prestigious Heed Foundation Fellowship and the Ronald G. Michels Fellowship in Vitreoretinal Surgery. Dr. Rodger is currently an Assistant Professor of Ophthalmology at USC in the vitreoretinal surgery and uveitis departments, and is a Visiting Associate in Medical Engineering at Caltech. Dr. Rodger has conducted groundbreaking research on the design, fabrication, and testing of high density microtechnologies for retinal and spinal cord prostheses and

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other novel bioMEMS for intraocular pressure reduction and monitoring, with a focus on parylene-based microelectronics. Dr. Rodger has written more than 40 journal and refereed conference proceeding publications and has been granted more than 20 patents.

PLM Road Map 2016 for the High Tech and Medical Device Industries is the must-attend event for high tech, medical device, and PLM practitioners globally—providing independent education and a collaborative networking environment where ideas, trends, experiences, and relationships critical to the industry germinate and take root. This one-day event will be held on May 24 at The Biltmore Inn & Suites in Santa Clara, California.

For more information visit: <http://www.cimdata.com/en/education/plm-conferences/2016-plmrm-htm>

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Siemens to Acquire CD-adapco- A CIMdata Commentary

29 January 2016

Key takeaways:

- Siemens' intent to acquire CD-adapco reinforces their commitment to the Simulation & Analysis (S&A) market and will expand and strengthen Siemens PLM Software's portfolio and position in this market
- CD-adapco's world-class and widely used capabilities in computational fluid dynamics and coupled flow/multi-physics applications are complementary to Siemens PLM Software's existing 3D simulation capabilities in their NX and LMS portfolios
- The previous acquisition of Red Cedar (HEEDS) by CD-adapco is an asset that further fills in Siemens PLM Software's simulation and analysis portfolio and adds management talent

In one of the biggest deals of its kind, Siemens announced that they have agreed to acquire CD-adapco in a stock purchase valued at \$970 million. CD-adapco is a leading global engineering simulation company with solutions covering a wide range of engineering disciplines, including Computational Fluid Dynamics (CFD), Solid Mechanics (SM), heat transfer, particle dynamics, reactant flow, electrochemistry, acoustics, and rheology. Their flagship product, STAR-CCM+ and its predecessor STAR-CD, are widely used across many industries and dominate in some, e.g., in automotive powertrain businesses.

“As part of its Vision 2020, Siemens is acquiring CD-adapco and sharpening its focus on growth in digital business and expanding its portfolio in the area of industry software. Simulation software is key to enabling customers to bring better products to the market faster and at less cost. With CD-adapco, we're acquiring an established technology leader that will allow us to supplement our world-class industry software portfolio and deliver on our strategy to further expand our digital enterprise portfolio,” said Mr. Klaus Helmrich, member of the Managing Board of Siemens. Siemens stated that CD-adapco will be integrated into the Product Lifecycle Management (PLM) software business of Siemens' Digital Factory (DF) Division.

CIMdata believes that this is a very smart acquisition by Siemens. It fills some gaps in Siemens PLM

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Software's S&A solution portfolio providing them with additional capabilities for aerodynamics, electromagnetics, and chemistry. It also addresses the competitive risk that CD-adapco, its technology, and customer base, might be acquired by a rival company. The purchase price clearly demonstrates *their* continuing commitment to S&A, and their view of its importance in helping companies develop innovative products faster and more efficiently.

For the past several years, S&A has consistently ranked in the top two or three fastest growing segments of PLM, with an average growth rate in the double digits. The CD-adapco acquisition when added to Siemens' current S&A revenues will improve Siemens PLM Software's position as a leading provider of engineering S&A software (see Figure 1).

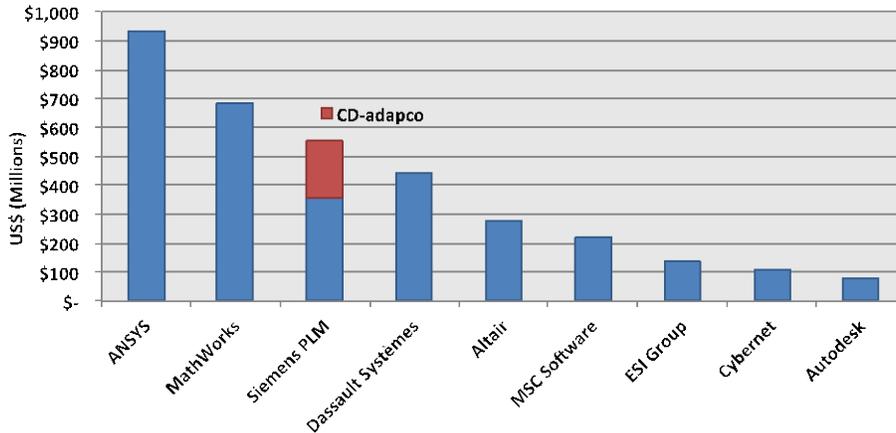


Figure 1—Leading S&A Solution Providers 2014 Revenues

Note that when the revenues of Siemens PLM Software and CD-adapco are combined, that entity is one of the largest in the S&A solution provider market.

Mr. Peter S. (Steve) MacDonald founded adapco in 1980 as a consultancy to provide structural engineering services to the nuclear power industry. After that market collapsed in the wake of the Three-Mile Island incident, Mr. MacDonald entered into an agreement with Professor Dr. David Gosman of Imperial College, London, to use Dr. Gosman's code, STAR, as a vehicle for consulting in the emerging field of computational fluid dynamics (CFD). That code was commercialized as Star-CD. Early successes for Star-CD included application to the cooling system of the GM Northstar engine in the 1980s, and numerous projects at Ford. What followed was a series of "firsts" in powertrain applications involving moving components: torque converters, centrifugal and gear pumps, and in-cylinder combustion with reciprocating pistons and valves that established CD-adapco as a leading provider of S&A solutions particularly in the automotive industry.

CIMdata believes that this acquisition reinforces Siemens PLM Software's strategy to be a formidable force in S&A and while it will expand and strengthen their portfolio of S&A solutions, it will have to be integrated with other Siemens PLM Software technology and solutions including Teamcenter as well as LMS and NX CAE. Historically, Siemens PLM Software has taken a considered approach to such acquisitions and has brought together the best of each application to create new, more capable solutions. For example, they have completed the integration of SDRC I-DEAS and their acquisition of NASTRAN into the NX CAE framework, and are well on their way to assimilating the technology acquired when they bought LMS. CIMdata expects that Siemens PLM Software will do the same with CD-adapco's comprehensive solution set.

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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. To learn more about CIMdata's services, visit our website at <http://www.CIMdata.com> or contact CIMdata at: 3909 Research Park Drive, Ann Arbor, MI 48108, USA. Tel: +1 734.668.9922. Fax: +1 734.668.1957; or at Oogststraat 20, 6004 CV Weert, The Netherlands. Tel: +31 (0) 495.533.666.

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Acquisitions

Siemens to buy CD-adapco for close to \$1 billion: source

25 January 2016

(Reuters) Siemens AG has agreed to buy CD-adapco, a privately held U.S. engineering software firm, for close to \$1 billion in cash, according to a person familiar with the matter.

Siemens's deal with CD-adapco could be announced as early as Monday, the person said, asking not to be identified because the agreement is not yet public. The two companies did not immediately respond to requests for comment.

Melville, New York-based CD-adapco makes computer programs used by engineers to simulate the inner workings of an engine. Those products will complement a business unit of Siemens focused on product lifecycle management software, the person added.

Since taking over Siemens as chief executive two years ago, former finance chief Joe Kaeser has set out to reshape the German company and make it more profitable and less cumbersome by selling off non-core units.

But Siemens has increasingly had to compete with software companies who can develop technology faster because they have a sole focus. Only 5 percent of Siemens' 350,000 employees are software engineers.

Siemens said in December it would raise its research and development budget as it seeks to maintain an edge in technology innovation over arch-rival General Electric Co.

The sale comes after CD-adapco's co-founder and CEO Steve MacDonald passed away last September. He was succeeded by his widow, Sharron MacDonald, who was named interim CEO and president.

Established in 1980 and still controlled by its founders, the company has 900 employees in 50 offices and has achieved \$200 million in annual revenue and an annual growth rate of 15 percent for the past five years, according to its website. Its main competitor in engine simulation software is Ansys Inc. NASA hired CD-adapco to help with simulation of structural engineering problems following the Space Challenger disaster in 1986. Car maker Renault SA's ([RENA.PA](#)) designers have also used CD-adapco software to simulate engine combustion, cooling and exhaust for Formula One race cars.

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Company News

Accenture: New Digital Portal Helps Product Developers and Engineers Accelerate Deliveries to Market

27 January 2016

[Accenture](#) has launched a digital portal that helps product developers such as engineers accelerate delivery of products to market at lower costs through greater efficiency.

The Portal consolidates large amounts of product development data from multiple enterprise systems in a single, organized view, reducing the time needed for product developers to search for this data by up to 95 percent. Leveraging this portal, these professionals can use analytics to anticipate and solve problems, as well as develop insights and make better-informed decisions.

Accenture developed the EPIC portal for companies that design, engineer and manufacture complex products in the aerospace, automotive, consumer products, electronics, industrial equipment, high-tech and life science industries. The portal features pre-defined integration with product lifecycle management, enterprise resource planning and a range of other applications used in product design and production.

“Throughout large, complex companies, product developers grapple with data scattered across too many siloed databases, complicated system user interfaces, and cumbersome access to analytics and product data reports,” said Kevin Prendeville, a managing director in Accenture’s Product Lifecycle Services business. “The EPIC portal equips engineers with one integrated source to identify risks and speed product deliveries whenever they need to, wherever they are, which increases efficiency and lowers costs.”

For example, a supply chain procurement engineer with an automotive manufacturer could use the EPIC portal to more rapidly ascertain the engineering status of automotive parts and avoid delays delivering products to market. Knowing this status also benefits numerous other corporate groups, including engineering, sourcing, quality, marketing, manufacturing and operations.

“Accenture’s product information portal addresses a common product innovation pain point,” said Jeff Hojlo, IDC program director for Product Innovation Strategies. “The product lifecycle management (PLM) portal encompasses all product innovation content in an organization ranging from PLM, enterprise, quality or compliance systems. These capabilities are not meant to replace PLM provider capabilities; rather, they are meant to complement them and extend PLM information to the global team.”

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Dassault Systèmes is highest ranked tech company in Global 100 World’s Most Sustainable Corporations

28 January 2016

[Dassault Systèmes](#) has been ranked second by [Corporate Knights](#) in the [2016 Top 100 Most Sustainable Corporations in the World \(Global 100\)](#) index and is now the highest ranked technology company on the list.

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This is the fifth consecutive year that the French software company has been included in the index and sees a significant leap from last year's ranking where the company was placed at number 17.

The Corporate Knights Global 100 index is recognised globally as the gold standard for corporate sustainability analysis. Rankings are based on the evaluation of a number of key performance indicators including environmental, social, financial and innovation capacity.

Dassault Systèmes provides business and people with **3DEXPERIENCE** universes to imagine sustainable innovations capable of harmonising product, nature and life. In this regard, sustainability is at the heart of all company activities—from its industry sectors to research and development, site management and human resources.

This year's list also includes many Dassault Systèmes customers who have employed the company's 3DEXPERIENCE platform to transform the way they design, produce and support products.

By implementing a strategy to optimise and transform its activities aimed at reducing its environmental footprint, Dassault Systèmes aims to be a 'net-positive company' – a company whose positive impact from the implementation of its solutions is greater than the negative footprint of its activities.

In a statement about its commitment to sustainability, Dassault Systèmes, says: "A leader in sustainable innovation, Dassault Systèmes delivers digital technologies, which have helped companies make headway in areas such as energy transition, sustainable mobility, and in the creation of intelligent cities designed to satisfy the evolving needs of the urban citizen. ... In the face of dire statistics, repeated climate warnings and dying ecosystems, it is encouraging to know that ground-breaking and promising alternatives, which can save our ailing planet, exist."

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Delcam's PartMaker Inc. to host Nationwide User Group Tour to Launch PartMaker 2016

29 January 2016

Delcam's PartMaker Inc. Division will host a series of User Group Meetings around the country to launch PartMaker 2016. The program at each event will feature comprehensive technical sessions on the new features of PartMaker 2016. PartMaker 2016 includes over fifty additional new features and enhancements, making it most significant release of the product to date. The event dates and locations are as follows:

February 24 – Memphis, Tennessee

March 18 – Philadelphia, Pennsylvania

April 1 – Chicago, Illinois

April 1 – Cleveland, Ohio

April 1 – New England

April 8 – Los Angeles, California

April 8 – Minneapolis, Minnesota

April 8 – Buffalo, New York

April 21 – Indianapolis, Indiana

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The full agenda, booking form and details including exact location for each event can be found at www.partmaker.com/2016usergroup

PartMaker product specialists will discuss the latest developments in PartMaker and will be on hand to answer any technical questions. They will also discuss the future of PartMaker's development efforts and to listen to delegates' input to incorporate into future versions. A complimentary catered breakfast and lunch buffet will be provided to all registered attendees. All attendees will also have the opportunity to race the PartMaker Inc. staff at each venue's indoor karting track, courtesy of PartMaker Inc. The Indianapolis event will feature a tour of the fabled Indianapolis Motor Speedway.

Major highlights of PartMaker 2016 include the most powerful 2 ½ axis milling machining strategies found on the CAM market today, support for the import of multiple solid models into a single PartMaker CAM project file, specialist support for broaching, faster 2D CAD drafting and tool path selection and much, much more.

Full details on the 2016 release, with videos demonstrating the new functionality, can be seen at www.delcam.tv/pmk2016/lz.

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Eastern European Manufacturers Stay Competitive With Radan And PartXplore from Vero

25 January 2016

An official distributor of Global CAD/CAM Supplier – Vero Software Group, has established a new partnership that is set to help manufacturers in Eastern Europe compete in the ever-changing manufacturing industry.

Dreambird, an official distributor of Vero's products in Russia, CIS and Baltic countries (Latvia, Lithuania & Estonia) has created a new partnership with two companies that will allow them to offer two of Vero's unique software solutions.

SPARK, a leading company that supplies tools and complex solutions for sheet metal processing in Russia and Technical Solutions Company; a dealer of Flow water jet cutting machines in the Baltic States, will now be offering both Radan and PartXplore solutions to their own specific customer base.

Radan is one of the world's leading CAD/CAM solutions for the sheet metal industry offering a unique combination of applications for Punching, Profiling, Bending, Design and Production Management for sheet metal fabrication. PartXplore is the world's most powerful, high-speed CAD file viewer and analyser available in today's market.

By adding the benefit of Radan and PartXplore to their range of technical solutions, both SPARK and Technical Solutions will be able to offer their customers the very latest technology in their associated industries.

Ada Lakevich, Marketing Executive at Dreambird says: "the market now requires more advanced, complex products for customers to stay competitive and cope with even shorter production lead times. By offering Radan and PartXplore it gives them the answer for the ever growing demand".

SPARK are based in St. Petersburg, Russia, and their customer base are among the largest Russian industrial market representatives.

Technical Solutions are located in Vilnius, Lithuania and also in Riga, Latvia. The company offers Coastone (CONE Series) entry-level package bending technologies for easy, cost efficient bending in

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situations where more advanced performance options are necessary.

Headquartered in England, Vero Software designs, develops, and supplies CAD/CAM/CAE software radically enhancing the efficiency of design and manufacturing processes, providing its customers with exceptional value through high productivity gains and significantly reducing time to market. The company's world-renowned brands include Alphacam, Cabinet Vision, Edgecam, Machining STRATEGIST, PEPS, Radan, SMIRT, SURFCAM, WorkNC and VISI, along with the production control MRP system Javelin. Despite the diversity of application, these solutions have one thing in common: they all address the rising challenges of achieving manufacturing efficiencies and bring huge value to the operations in which they are deployed.

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Infosys invests \$4 million in US-based start-up Waterline Data Science

28 January 2015

Infosys Ltd has bought a minority stake in Waterline Data Science Inc., a start-up based in Delaware, US, which helps companies make sense of large data sets, for \$4 million.

Infosys investment allows it to have “a minority holding, not exceeding 20% of the outstanding share capital of the company” and it expects to close its investment by 4 February, the company said on Thursday. Waterline Data Science is backed by former LinkedIn executive Dipchand “Deep” Nishar, and Menlo Ventures and Jackson Square Ventures (formerly Sigma West).

The deal, which marks the Indian company's seventh investment from its \$500 million innovation fund, could help generate revenue from its clients who want to make sense of data sets which are held in Hadoop, a large open source big data repository.

Hadoop is an open source software framework which allows companies, from banks to large manufacturing firms, to store data. It also offers these companies a set of functions to customize it according to their needs, and globally, as most companies have relied on Hadoop, the software repository now holds an enormous amount of data. But fishing out data from Hadoop has been a tedious task. This process has been made easier by the emergence of start-ups like Waterline Data Science which through its intelligent platforms automates some of the work of finding data. Interestingly, Waterline Data Science emerged from stealth mode only in October last year.

“We see a need for automated data discovery solutions like Waterline Data Science in helping our clients achieve greater business value from their Big Data assets,” Ritika Suri, senior vice-president of corporate development at Infosys, said on Thursday.

Infosys's approach of picking minority stakes in start-ups focused on new-age technologies underlines chief executive Vishal Sikka's so-called ‘New and Renew’ strategy to reinvigorate India's second-largest software services company.

Infosys has spent \$29.4 million to buy stakes in six start-ups and invested an undisclosed amount in September to become a limited partner in Vertex Ventures, a Palo Alto-based venture capital firm.

Infosys invested \$4 million in CloudEndure, an Israeli start-up that helps large companies move applications to cloud and cloud-based disaster recovery software, and \$3 million in a Delaware, US-based start-up Whoop, which makes activity trackers, in December last year. The company also paid \$1.4 million for a 5% stake in ANSR Consulting, a Bengaluru firm that helps global firms set up

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offshore captive centres in India; \$15 million in a spin-off unit of Dreamworks Animation; and \$2 million to pick a minority stake in AirViz, a personal air quality monitoring start-up from Carnegie Mellon University.

Infosys also bought three firms in 2015, spending \$390 million to purchase automation technology provider Panaya, digital commerce firm Skava and Noah Consulting Llc.

Lantek appoints new distributor in the Netherlands

25 January 2016

[Lantek](#) announced that it has appointed CNC Gear, based in Beuningen, near Enschede as the new main distributor for Holland for its world leading sheet metal CAD/CAM products. Lantek recently opened an office in Utrecht to expand its presence in the Benelux region, where it already has over 600 customers. By appointing CNC Gear it will be ensuring that Dutch sheet metal manufacturers will be able to have access to Dutch speaking sales and support services for Lantek's extensive range of products.

Jelle van Harselaar, Managing Director of CNC Gear says, "In our company we have 10 years of experience in sheet metal manufacture and we recognise that Lantek is a leader in its field with its flagship CAD/CAM software, Lantek Expert. Combining this with Lantek Flex3d for steelwork applications, and additionally, the Lantek Workshop and Lantek Integra range of factory management systems, we will be able to address the complete production process."

Alberto Martínez, General Manager of Lantek adds, "Our branch office in Holland and the appointment of CNC Gear as the new main distributor is part of our commitment to a global-local strategy in our expansion plan. It allows us to be closer to our markets and react more quickly to changes and new needs. We look forward to working with CNC Gear and helping it to offer the best possible levels of service and support to its customers."

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Mastercam joins WorldSkills

28 January 2016

[WorldSkills International](#) has welcomed [Mastercam](#) and its expertise in CNC machining software to the Global Partner group. Mastercam products are sold through its worldwide network of certified value-added resellers who provide product training, start-up services, and ongoing support.

David Hoey, CEO of WorldSkills International, said, "At WorldSkills, we are looking for the best industry partners globally that believe in the WorldSkills mission and vision, and collectively want to improve the world with the power of skills. Mastercam supports our goals and wants to help us in the machining arena increase the excellence in skills. I look forward to working closely with Mastercam throughout this partnership."

For [Meghan West](#), president of CNC Software Inc./Mastercam, partnering with WorldSkills made strategic sense. "For more than 20 years, Mastercam has proudly held the designation of Exclusive CAM Partner at WorldSkills, and the transition to a Global Partner further solidifies our relationship and commitment to [them]. We are excited for the future of both the WorldSkills events, as well as the future of manufacturing and skilled trades as a whole."

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NGC Expands Its Total Solutions Offerings with Management Consulting Services

26 January 2016

NGC Software has expanded its Consulting Services offerings with the addition of Management Consulting Services, bringing a new executive level of consulting services to the apparel industry.

With NGC's Management Consulting Services, companies can directly engage with senior-level apparel experts to develop the right business and technology strategies to drive efficiency and growth. NGC business consultants have a minimum of 20 years apparel industry experience in executive-level roles that include presidents, executive vice presidents, and vice presidents or directors of specific business disciplines.

NGC's Management Consulting Services are available for a number of areas in the apparel industry, including executive management and coaching, finance, supply chain, manufacturing and global sourcing, planning, distribution, and systems. NGC's Management Consultants work closely with customers on setting goals and key performance indicators, and then developing, documenting, and adopting a strategy for systems or services engagement.

With its new Service offerings, NGC continues to differentiate itself from other providers in fashion and apparel technology. NGC complements its best-in-class software for [fashion PLM](#), [apparel ERP](#) and supply chain with experienced and knowledgeable implementation experts, and business consulting by executives from senior management positions in the apparel industry.

"NGC Consulting Services has worked carefully to develop a strategic approach to success, both for our customers and ourselves, and our Management Consulting Services is a key part of that," said Fred Isenberg, president of Consulting Services for NGC. "NGC's total solutions approach to systems and software is a key reason behind our outstanding performance in customer satisfaction surveys."

NGC Software is a leading provider of Product Lifecycle Management (PLM), Supply Chain Management, ERP and Shop Floor Control software and services for brands, retailers and consumer products companies. NGC solutions help increase profitability, reduce costs, improve speed to market and product quality, and manage compliance and testing. NGC was recognized as a leader in 34 categories in the 2015 *RIS News* Software Leaderboard and has received top rankings by leading industry analysts.

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PROSTEP partners with 3DA Systems

26 January 2016

PROSTEP, Inc, a Birmingham, MI, USA, company, is pleased to announce a new partnership with 3DA Systems (www.3dasystems.com), based in Victoria, BC, Canada. Both companies aim to provide the AEC / BIM community with the most comprehensive tools to communicate rich 3D data via the universal PDF file format.

With 3D PDF Converter for Revit, designers and architects can forward three dimensional images created in Autodesk® Revit® to anyone with a current version of the freely available Adobe® Reader. An expensive, specialized design program license is no longer necessary to share design elements and protect intellectual property.

Additionally, PROSTEP's 3D PDF Pro, a plugin for Adobe Acrobat Pro, enables engineers and project

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planners alike to demonstrate projects more effectively with 3D PDF documents by creating interactive sequential animations directly within the PDF.

The partnership between PROSTEP, Inc and 3DA Systems allows 3DA Systems customers to access applications designed to supercharge 3D PDF documents. With 3D PDF Pro, users have full control of the data communicated between extended team members in any BIM project, giving them a significant advantage over competitors.

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Sigmatrrix CETOL 6 σ Awarded Certified Gold Status by DS SolidWorks Corp

26 January 2016

Sigmatrrix today announced that its CETOL 6 σ TM for SOLIDWORKS®, a fully integrated 3-D tolerance analysis software solution for engineering and design teams, has been awarded Certified Gold status by DS SolidWorks Corp.

As a SOLIDWORKS Certified Gold Partner product, CETOL 6 σ for SOLIDWORKS marries the power and functionality of SOLIDWORKS's parametric design capabilities with the precise calculations and advanced mathematical technologies of CETOL 6 σ . Users can utilize seamless integration, complete with full model associativity, to visualize the potential impact that tolerance changes will have on their overall assembly. This single-window integration of CETOL 6 σ with SOLIDWORKS allows users to analyze and improve their designs faster than ever, and because changes made to the tolerances automatically update the CAD data they can be assured their improvements are correctly incorporated within the design definition and hence the final product.

Andy Beeson, Principal Engineer, utilizes CETOL 6 σ at Smiths Medical. “CETOL 6 σ leverages the power of SOLIDWORKS to perform sophisticated, integrated studies of mechanical and manufacturing variation,” he explained. “It expands upon variation analysis studies that spreadsheets cannot perform in 3 dimensions.”

CETOL 6 σ is unique from other solutions on the market. It is the only **3D tolerance analysis solution** integrated within SOLIDWORKS. CETOL 6 σ uses a direct mathematical method that enables users to see the results of their tolerance changes immediately rather than having to rerun simulations each time. CETOL 6 σ allows companies in virtually all industries to gain profound insight into the behavior of their products. Whether it's a powertrain being designed in the automotive industry, or a medical device, or a wind turbine, CETOL 6 σ for SOLIDWORKS is the dominant solution for tolerance analysis throughout the world. It is an ideal tool for many other industries as well, including aerospace and defense, heavy industry, HVAC, consumer products, safety, security, and electronics.

“Sigmetrix has been a valued SOLIDWORKS Solution Partner since 2008 with their tolerance analysis software CETOL 6 σ ,” said Suchit Jain, Vice President, Strategy and Business Development, Dassault Systèmes SolidWorks. “CETOL 6 σ is now a SOLIDWORKS Certified Gold Product. Sigmetrix attained this significant designation by meeting the stringent SOLIDWORKS criteria for fully integrated interoperable functionality, quality, industry expertise, and high levels of customer satisfaction.”

“This Gold Certification recognizes the highest level of integration of CETOL 6 σ for SOLIDWORKS and SOLIDWORKS 3D CAD software. The tight integration accelerates the entire design to manufacturing cycle, allowing for increased productivity, a more robust product that hits the market sooner, and reduced costs,” says Chris Wilkes, President and CEO of Sigmetrix.

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Thomas Enterprise Navigator Technology Brings Thousands of CAD Files and Product Specs to TE-CO Customers

26 January 2016

TE-CO Workholding has integrated its website with the Navigator Platform, a Thomas Enterprise Solutions technology that allows TE-CO to provide its customers with thousands of CAD models and product specifications.

The announcement follows a recent partnership between the two companies that emerged to help TE-CO and its distributors improve efficiencies in the availability and flow of rich product data to provide end-users with a better digital experience when searching for TE-CO products.

Headquartered in Union, Ohio, TE-CO manufactures a diverse line of workholding products used by small machine shops and Fortune 100 companies alike. Products include clamping and set-up tools, tooling components, CMM fixturing and spring-loaded devices for military jets and drones, surgical instruments and a range of other industrial products.

Prospective TE-CO customers — typically OEM engineers — require up-to-date CAD models and specs to ensure the products will fit their exact specifications. With a powerful eCatalog active on TE-CO's website, customers can access a searchable library of thousands of detailed product specifications. When a product is selected, users can dynamically generate a 3D CAD model or drawing from the latest data in the Navigator eCatalog. Customers can thus be assured they are getting the most up-to-date data with every download.

“The integration with Thomas Enterprise’s Navigator Platform brings a more positive digital experience to our customers,” said Darin Wion, Vice President of Sales and Marketing at TE-CO. “The technology’s capabilities helps our clients get the most current specifications and assures them they can confidently commit TE-CO products into their projects.”

Navigator is an innovative and dynamic eCatalog designed by Thomas Enterprise explicitly for use in with complex industrial products. Aside from generating specs, CAD models, and drawings, Navigator also functions as a content management system that allows manufacturers to easily maintain product data across their own website and with their distributors. Product manufacturers of complex industrial components depend on the Thomas Enterprise platform to deliver multiple CAD formats and a world-class digital customer experience on their website.

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Event News

3D Systems to Showcase Advanced 3D Technology as Platinum Sponsor at SOLIDWORKS World 2016

26 January 2016

[3D Systems](#) announced today that it will feature its latest 3D printers, materials and software solutions, as well as its on-demand parts manufacturing services as a platinum sponsor at SOLIDWORKS World 2016 in Dallas, TX, January 31 - February 3. Visitors to the show are invited to experience how 3D Systems’ offerings complement and enhance SOLIDWORKS® software to transform the way users work and manufacture. 3D Systems can be found at booth 707 of the Kay Bailey Hutchison Convention Center.

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Products and services on display at booth 707 will include:

Direct scan-to-CAD workflow integration with the industry-leading, SOLIDWORKS-certified [Geomagic Capture® for SOLIDWORKS®](#) and [Geomagic® Design™ X](#). Using the integrated 3D Systems Capture 3D scanner and Geomagic software, SOLIDWORKS users can rapidly and accurately import precise feature-based 3D scan data directly into their CAD software to rebuild lost CAD data or create new CAD data for existing products.

- **GibbsCAM® production machining software**, a SOLIDWORKS-certified CAM solution. The combination of GibbsCAM and SOLIDWORKS provides a complete CAD/CAM solution that addresses the need of nearly every manufacturing environment, from simple 2.5-axis milling or 2-axis turning to complex 5-axis machining or Swiss-style turning centers. This combination helps users eliminate scrap and reduce cycle times while optimizing the machining process for maximum efficiency, safety and profitability.
- **A preview of the ProJet® MJP 2500 Series**, the latest in professional 3D printing with an affordable, office-friendly footprint and easy part processing. The ProJet MJP 2500 Series is designed to enable a broader range of professionals to create precision parts without leaving their workplace. The ProJet MJP 2500 is currently in beta testing and commercial availability will be announced at a later date.
- **The [ProJet MJP 3600 Series](#) for high throughput, high speed 3D printing**, designed to bring enhanced productivity to a wide range of prototyping, casting and end-use part production needs. The powerful data processing capabilities of this series enable it to support files up to 250% larger than the previous generation, at up to twice the speed. The ProJet MJP 3600 Series uses VisiJet®M3 plastic materials to deliver incredible detail, high temperature resistance and watertight surfaces, and also includes models for printing detailed wax patterns for investment casting applications.
- **Production-grade Stereolithography (SLA) printing on the [ProJet 6000](#)**, offering a wide choice of materials that match or exceed the properties of traditional plastics, including high temperature resistance, tensile strength and impact strength, as well as USP Class VI capable materials for bio-compatible medical or dental applications. The ProJet 6000 delivers fast, high quality 3D printing with exceptional ease-of-use throughout set up, build optimization, monitoring, and printing.
- **[3D Systems' On-Demand Parts Manufacturing](#)**, Quickparts, providing advanced prototyping and production solutions using traditional and additive technologies, materials and finishing options. With instant online quoting and a global team of 3D printing experts committed to quality and customer service, 3D Systems' custom parts service connects designers, engineers and manufacturers with a complete range of solutions from anywhere in the world, at any time.

“Our ecosystem of 3D scanning, printing and manufacturing solutions integrates seamlessly with SOLIDWORKS,” said Cathy Lewis, Executive Vice President and Chief Marketing Officer, 3D Systems. “This allows designers, engineers and innovators to accelerate their designs, improve their

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products, and transform their workflows.”

3D Systems will also host a breakout session on “Designing Additive Manufacturing for Production” by Chris MacBain, Product Marketing Manager, Software, 3D Systems. An expert in prototyping and mold making, MacBain will discuss how additive manufacturing enables designers to bypass previous design limitations and improve the performance of manufactured parts. MacBain will also offer insight into the necessary considerations when designing parts for production, and explain the benefits of integrating GibbsCAM with SOLIDWORKS. See MacBain’s presentation at 1:30pm on Monday, February 1, Room D170/172.

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BobCAD-CAM to Show New BobCAM for SOLIDWORKS CNC Software at SOLIDWORKS World 2016

27 January 2016

BobCAD-CAM’s latest CNC software release will be on full display at the upcoming SOLIDWORKS World 2016 and attendees will be among some of the first to see the new BobCAM for SOLIDWORKS™ Gold Product CAM plug-in.

The new [BobCAM V5](#) CNC programming software, which launched in December 2015, includes more features and overall system improvements than ever before. It also marked the release of two completely new add-on modules: [Mill Turn](#), a CAM programming product for multitask machining, and [BobART](#), an artistic application.

The new modules and V5 software will be shown at BobCAD-CAM’s booth in the Partner Pavilion section of the SOLIDWORKS™ World show, which is scheduled for January 31 – February 3 in Dallas, TX.

“There’s a lot of new CAM functionality and programming power packed into the new BobCAM product,” explains Sean Owen, COO of BobCAD-CAM. “This version includes tons of new features that were built directly from customer feedback and should go a long way towards making programming quicker and easier. We’re also excited to finally offer our popular BobART product for BobCAM so that SOLIDWORKS™ users can access the full array of powerful artistic tools. It’s an incredibly versatile product that really magnifies the creative power designers have at their fingertips.”

Beyond the booth, BobCAD-CAM will also be one of the featured presenters at the Certified Partner Theater. Attendees will be able to watch a full presentation on the new BobCAM software at 7:15 pm EST / 6:15 pm CST Monday, February 1st in Exhibit Hall C of the Convention Center.

At the booth, members from the Development & Technical teams will be on hand to provide one-on-one demos and answer programming questions throughout the show. The demos will be available daily at the BobCAD-CAM booth #629.

Teachers, school administrators, and students can also meet with BobCAD-CAM’s Director of Education, Dane Pendleton, at the show to talk about the company’s Manufacturers of the Future program. Dane will be on hand to discuss the program’s new online educational training resources, new Work Ready career oriented student program, and many other ways Manufacturers of the Future program is aligning the goals of schools, students, and manufacturing businesses.

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CD-adapco Subsea Seminar Takes Deep Dive into Benefits of Simulation

27 January 2016

CD-adapco, the largest privately held CFD-focused provider of Computer Aided Engineering software, is hosting an oil and gas seminar on January 28 in Houston, Texas titled, "[Subsea: Improving Safety and Mitigating Risk through Simulation.](#)" This complimentary event will unveil some of the financial benefits the use of simulation can offer subsea engineers.

As companies involved in the global Oil and Gas industry seek to remain profitable while oil prices slump to record lows, they are increasingly turning to engineering simulation as a method of reducing equipment failure, while simultaneously using simulation to improve product longevity and reduce operating costs.

[This seminar](#) will include presentations from CD-adapco experts and major industry influencers such as Wood Group Kenny and Norton Straw Consultants. Topics to be discussed include erosion, thermal analysis, flow-induced and vortex-induced vibration, and separators. The event will also include a demonstration and hands-on session with STAR-CCM+®, CD-adapco's flagship simulation tool.

Register for this event at <http://www.cd-adapco.com>.

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GRAPHISOFT Webinar: Introducing Twinmotion for ARCHICAD

26 January 2016

GRAPHISOFT, a leading Building Information Modeling (BIM) software vendor will hold a live online webinar on **February 2** introducing Twinmotion for ARCHICAD.

Award-winning Twinmotion is a real-time visualization technology changing the way designers and engineers interact with their models. Developed by Ka-Ra and distributed worldwide by Abvent, Twinmotion is compatible with every 3D modeling software on the market today, including ARCHICAD. Twinmotion is a great fit for any landscape, urban planning or building professional. Designed with an easy, intuitive user interface, it can be used right out of the box. In addition to being incredibly easy to use, Twinmotion creates high quality images and animations in the blink of an eye.

Join them on **February 2** for a live online webinar led by Ildikó Szabó of Abvent who will walk you through a workflow demo of Twinmotion 2016, highlighting all the fantastic new features in the latest version of this game-changing visualization software. Twinmotion 2016 offers several productivity enhancements, such as:

- smooth collaboration with ARCHICAD and BIM solutions
- point cloud import and automatic conversion to a terrain in Twinmotion
- enriched object library: vegetation, animated characters, vehicles, fountains
- expanded material library: ceilings
- project phasing

In addition, BIMmotion, the revolutionary stand-alone viewer, allows Twinmotion users to share an .exe file with their clients, enabling them to explore the project on their own — following it from start to finish. All this is now possible without having to install Twinmotion. (Windows only.)

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WHEN: Tuesday, February 2, 2016

REGISTER: <http://www.graphisoft.com/learning/online-seminars/registration-twinmotion.html>

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NUM To Demonstrate END-MILL Grinding Software Innovation At GrindTec 2016

26 January 2016

NUM will be demonstrating an innovative new development to its renowned NUMROTO tool grinding software at GrindTec 2016. The company is launching a suite of enhancements for the package, including new gash out-X and flute-X facilities that pave the way for next-generation complex geometry tools.

NUM has also further enhanced the flexibility of NUMROTO by adding a number of new facilities for end-mills and drills. These include ‘Quickedit’ pages to simplify parameter selection for re-sharpening standard tools, predefined minimum cycle times to ensure reliable communication between the PC and the CNC even when generating very high precision tool paths with many points, and optimized grinding of rough profile end-mills.

First launched in 1987, NUMROTO software has become the preferred choice for many of the world’s leading manufacturers of machines for the production and re-sharpening of tools such as end-mills, drills, step drills, form cutters and many others. Compared to some competitive products on the market, the software provides a much more direct and efficient path between tool design and manufacture. Featuring an integrated modeling-simulation-interpolation chain, NUMROTO avoids the sequential CAD-to-CAM and CAM-to-CNC translation phases of conventional software approaches and provides a true WYSIWYG output. This helps users of tool grinding machinery sidestep multiple data format changes and emulations.

NUM’s stand at GrindTec 2016 – 7070 in Hall 7 – should be the first port of call for visitors wishing to see the future of CNC machine tool automation. Technical staff, equipped with computer workstations, will be on hand to demonstrate the advantages of NUMROTO software and to answer customers’ questions.

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PTC Hosts Upcoming Augmented Reality ‘ThingEvent’

25 January 2016

Later this week, on January 28, [PTC](#) will host its exclusive [ThingEvent](#), focused on augmented reality (AR) in the enterprise. This livestream event will highlight real-world customer solutions from leading manufacturing companies as well as new technologies that will transform how humans interact with and experience the physical ‘things’ around them in the era of the Internet of Things (IoT).

By seamlessly overlaying digital data onto the physical world – and providing a rich, visual, interactive experience – augmented reality can fundamentally improve and transform the way we design, manufacture, operate, and service smart, connected products and systems.

ThingEvent attendees will see live demonstrations of practical uses of augmented reality for business, presented by PTC executives and representatives from leading manufacturing companies. These PTC customers will share the benefits of presenting enterprise information and live streaming sensor data

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through augmented reality, enabling deeper insight into product behavior and usage, better execution of service procedures, more comprehensive training of staff, as well as many other value propositions that are driven by various use cases.

The event program will feature PTC's CEO Jim Heppelmann, co-author of recent thought leadership articles published in the Harvard, who will explain how augmented reality will play a primary role in PTC's IoT platform. The program will also include Jay Wright, PTC SVP and General Manager for Vuforia, who will discuss the expansion of the Vuforia platform to enable new enterprise solutions in addition to consumer-facing applications. Recently acquired by PTC, Vuforia is the world's most widely used augmented reality platform.

PTC invites you to join a worldwide audience of thousands via live streaming of this exciting event:

Date: January 28, 2016

Time: 9:00 AM EST and 3:00 PM EST

Registration: www.thingevent.com

“The incredible opportunities presented by the IoT, give rise to the need for a whole new generation of enabling technologies,” said Jim Heppelmann, president and CEO, PTC. “We hope you can join us on January 28 for this special event. Be there to witness the vision, hear the strategy, and see the unveiling of a new suite of products, coming later in 2016, that will harness the power of augmented reality and transform forever how we experience things.”

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Vero To Demonstrate ‘key’ Benefits At SIMODEC Show In France

29 January 2016

Global CAD/CAM provider, Vero Software, will demonstrate the latest Edgecam and PartXplore solutions and benefits at the SIMODEC show in France, from 8th – 11th March 2016.

SIMODEC is the International Bar Turning Machine Tool Show, which brings together the most important national and international businesses' in the bar turning, machining and parts production industries. The show attracts many exhibitors from across Europe (mainly France, Germany, United Kingdom, Italy, Switzerland and the Czech Republic).

Vero will be exhibiting the latest Edgecam and PartXplore solutions in Hall D, Stand P11 at the ‘Salon international de la machine-outil de décolletage.’

Edgecam, a market leading computer aided manufacturing (CAM) system, will be demonstrating their major new 2016 R1 release. Benefits include the new time-saving pre-finish plunge option, the new ramp cut strategy (which is typically used for turning deep recesses with double-sided turning inserts and extends tool life) and a function used for both milling and turning operations which now saves additional time on the Update Stock command. New functionality has also been added to the area of machine tool configuration; continuing the evolution of catering for milling machines with turning capabilities. Edgecam 2016 R1 has introduced full support for head-table machines, including support for Siemens, TNC and ISO programming languages.

PartXplore, the ideal tool for directly displaying and evaluating 3D CAD files without the need for the original CAD application, will be also present. PartXplore has been created to efficiently import and analyse all file types and sizes at high speed. It often takes less than half the time to open a file

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compared to the original CAD application.

Vero, who are now part of Hexagon Manufacturing Intelligence, will be sharing their stand and customers will be able to see the Optiv Classic 322/432 – an entry level model of the multisensory range from Hexagon MI, which helps users measure efficiently and flexibly. The Vision sensor with a digital CCD colour camera and motorised CNC zoom as well as optional touch-trigger probes are also part of the package. The unique features of the PC-DMIS Vision software facilitate the measurement process. Hexagon MI chose this particular product because it's tailored to local market conditions.

Commenting on the upcoming event, Samantha Mayet, Marketing Coordinator at Vero France said: “SIMODEC is a very well organised exhibition and well-known for the opportunities it creates; meeting and sharing with peers, doing business, discovering innovations and research in the industry. It therefore provides a great platform for Edgecam and PartXplore to demonstrate their latest technology to exhibitors from a host of different countries.”

More information about the SIMODEC Exhibition including full venue location and times can be found at: <http://www.salon-simodec.com/>

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VISI 2016 R1 On Show At SamuEXPO In Italy

29 January 2016

The latest version of the Mould and Die CAD/CAM system, VISI, will be presented at a trade show In Northern Italy which focuses on the tools and technology sector for metal workings.

The SamuEXPO combines three different events – SamuMetal, SamuPlast and SubTech; with each event providing the chance for exhibitors to find the latest technology and innovations in their sector.

Vero Solutions srl, the direct Italian reseller of VISI CAD/CAM software, will be attending the show, which runs from 3rd – 6th February 2016 at Pordenone in Northern Italy. The main focus of attending is to showcase the latest VISI software which has two versions released each year.

The new VISI 2016 R1 release introduces a number of new product features, with the continued focus on solutions for plastic moulds, sheet metal and die. Major enhancements include a graphical interface to date with a new toolbars shortcut, commands available directly next to the mouse position, better hidden line removal and geometry selection mode “free form “. Furthermore, CAD interfaces have been updated to support the latest third-party formats, including Inventor 2016, layer management in Siemens NX and attribute mapping hole for Catia V5/6.

Commenting on the upcoming event, Giovanni Piccoli of Vero Solutions Srl said: “We are very excited to have the opportunity to present the new functionality in this release of VISI. SamuEXPO is a main event in Eastern part of Italy for these types of industries and is the perfect opportunity to have focused discussions on everyday topics for manufacturers and users.”

More information about the SamuEXPO event including locations and times can be found on at: <http://www.samuexpo.com/>

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Financial News

EMC Reports Fourth-Quarter and Full-Year 2015 Results

27 January 2016

EMC Corporation today reported fourth-quarter and full-year 2015 financial results.

Fourth-quarter consolidated revenue was \$7 billion, flat year over year (up 3% on a constant currency basis²). GAAP net income attributable to EMC was \$771 million in the fourth quarter, and GAAP earnings per weighted average diluted share was \$0.39 in the fourth quarter. Non-GAAP¹ net income attributable to EMC was \$1.3 billion in the fourth quarter, and non-GAAP¹ earnings per weighted average diluted share in the fourth quarter was \$0.65.

Full-year 2015 GAAP and non-GAAP³ revenue was \$24.7 billion and \$24.8 billion, respectively, up 1% year over year (up 5% on a constant currency basis²). GAAP net income attributable to EMC for 2015 was \$2 billion, and GAAP earnings per weighted average diluted share was \$1.01. Non-GAAP³ net income attributable to EMC for 2015 was \$3.6 billion, and non-GAAP³ earnings per weighted average diluted share for 2015 was \$1.82.

EMC generated \$1.9 billion in operating cash flow and \$1.5 billion in free cash flow⁴ in the fourth quarter, and ended the quarter with \$14.8 billion in cash and investments. EMC returned approximately \$229 million to shareholders via a quarterly dividend.

Joe Tucci, EMC Chairman and CEO, said, “The fourth quarter of 2015 follows 24 consecutive quarters of reported year-over-year top-line growth; an accomplishment very few of our peers have matched. 2015 brought geopolitical and other market-wide uncertainties, while secular technology trends continued to accelerate. EMC anticipated and focused on capturing the massive growth opportunity these trends will avail, and we are well equipped in 2016 with some of the most exciting technology advancements in our history.”

Tucci added, “Together, EMC and Dell will be better positioned in the market. We believe that the coming together of the companies is the best strategic option for all stakeholders. I'm pleased to report that progress on closing the transaction remains on track under the original terms and timeline.”

Zane Rowe, EMC CFO, said, “As we work toward closing the transaction with Dell to build one of the world's premier IT powerhouses, we continue to focus on synergies and operating efficiencies across our business. Our previously announced \$850 million cost reduction and business transformation plan is on track and the initial \$50 million cost reduction target was met in Q4. We are confident that we will exceed our goal, thanks to our unified team's effort and focus.”

David Goulden, CEO of EMC Information Infrastructure, said, “Customers are buying ‘just enough’ and ‘just in time’ for their traditional environments. They are also transforming existing IT systems toward a Hybrid Cloud or building and deploying new digital applications. In some cases they are doing it all simultaneously. Against this market backdrop, our storage business revenue grew 3% in constant currency for the full year. Looking forward, I am excited about our position in 2016 as we further expand our industry-leading Storage and Converged Infrastructure portfolio, which is built upon the architectural pillars of the modern data center – Flash, Scale-Out, Software Defined, Cloud Enabled and Trusted technologies.”

EMC Information Infrastructure business fourth-quarter revenue was down 4% year over year (down

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1% on a constant currency basis²) and full-year 2015 revenue was down 2% year over year (up 2% on a constant currency basis²). Information Storage fourth-quarter revenue was down 4% year over year (flat on a constant currency basis²) and full-year 2015 revenue was down 1% year over year (up 3% on a constant currency basis²). EMC XtremIO ended the year with over \$1 billion in revenue. VCE exited 2015 with an annualized demand⁵ run rate exceeding \$3 billion. Virtustream ended the fourth quarter with the strongest quarterly bookings in its history.

VMware fourth-quarter and full-year GAAP revenue within EMC was up 10% and 9% year over year, respectively. Fourth-quarter and full-year non-GAAP³ revenue within EMC were both up 10% year over year (both up 13% on a constant currency basis²). VMware customers continue to invest in Software-Defined Data Centers, Hybrid Cloud solutions and End-User Computing.

Pivotal continues to gain momentum as it helps the world's largest enterprises successfully expand their digital capabilities, with fourth-quarter revenue up 25% year over year. Pivotal continues its transition to a subscription business model, with annual recurring revenue⁶ up 40% compared to the previous quarter with strong performance in all geographies and product areas, while continuing to expand its customer base across many industries including Automotive, Financial Services, Insurance, Retail and Telecommunications.

Consolidated fourth-quarter revenue from North America was flat year over year. Fourth-quarter revenue from the Europe, Middle East and Africa region was down 1% year over year (up 7% on a constant currency basis²). Asia Pacific and Japan fourth-quarter revenue was flat year over year (up 4% on a constant currency basis²). Latin America fourth-quarter revenue was down 16% year over year (down 5% on a constant currency basis²).

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Fujitsu Reports 2015 Third Quarter Financial Results

29 January 2016

Fujitsu today reported profit for the period attributable to owners of the parent of 5.2 billion yen, representing a deterioration of 22.3 billion yen from the third quarter of fiscal 2014.

Consolidated revenue for the third quarter of fiscal 2015 was 1,166.9 billion yen, essentially unchanged from the third quarter of fiscal 2014. Revenue in Japan decreased 1.5%. Although revenue in Japan from system integration services increased, revenue from PCs and server-related products decreased. Revenue outside of Japan rose 1.2%. Revenue from the Mobilewear sub-segment increased. Fujitsu recorded an operating profit of 14.0 billion yen, down 19.1 billion yen from the third quarter of fiscal 2014. The decline was the result of recording 17.6 billion yen in business model transformation expenses for strengthening business fundamentals in the EMEIA region, such as expenses relating to the closure of a product development facility in Europe.

Net financial income was 2.5 billion yen, down 2.9 billion yen from the same period in fiscal 2014, when the company recorded a net gain on foreign exchange because of the sharp fall in the value of the yen.

As a result, the profit before income taxes was 19.9 billion yen, a decline of 20.8 billion yen from the third quarter of the previous fiscal year.

Revenue in the Technology Solutions segment amounted to 800.3 billion yen, essentially unchanged from the third quarter of fiscal 2014. Revenue in and outside of Japan was also for the most part

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unchanged. Revenue in the Services sub-segment in Japan rose due to growth in system integration services on higher investment by customers in the financial services and public sectors. In the System Platforms sub-segment, however, revenue in Japan fell due to the adverse impact of large-scale mainframe-related deals in the previous fiscal year's third quarter. The segment posted an operating profit of 34.9 billion yen, representing a year-on-year decline of 9.6 billion yen. The decline was the result of recording 15.9 billion yen in business model transformation expenses. Excluding such expenses, despite the adverse impact of lower server-related revenue, the segment's operating profit rose on account of cost efficiencies and the impact of higher Services revenue in Japan.

Revenue in the Ubiquitous Solutions segment was 259.2 billion yen, a decrease of 3.7% from the third quarter of fiscal 2014. Revenue in Japan fell by 5.9%. Although revenue from the Mobilewear sub-segment increased, revenue from PCs fell, primarily in enterprise PCs. Revenue outside Japan was essentially unchanged. Revenue from PCs in Europe fell, but revenue in the Mobilewear sub-segment rose, primarily in Europe and the US. The segment posted an operating loss of 1.0 billion yen, essentially unchanged from the same period in fiscal 2014. Higher procurement costs for US dollar-denominated components in Europe due to the continuing weakness of the euro against the US dollar, adversely impacted results in PCs, and 1.6 billion yen in business model transformation expenses were also recorded, but these were largely offset by cost-saving measures.

Revenue in the Device Solutions segment amounted to 151.6 billion yen, down 1.3% from the third quarter of fiscal 2014. The segment posted an operating profit of 5.7 billion yen, down 8.8 billion yen from the third quarter of fiscal 2014. In addition to the impact of transferring the system LSI device business to an affiliate, operating profit declined because, in the third quarter of fiscal 2014, there was a gain on the sale of equipment stemming from the closure of a production line.

Fujitsu has revised its full-year fiscal 2015 financial forecast announced on October 29, 2015, as follows.

The revenue forecast has been reduced by 80.0 billion yen from the announcement last October, to 4,800.0 billion yen. The forecast for revenue in the Technology Solutions segment has been reduced by 50.0 billion yen because of lower demand for network products. The forecast for revenue in the Device Solutions segment has been reduced by 30.0 billion yen on lower demand for devices used in smartphones and PCs.

The forecast for operating profit has been reduced by 20.0 billion yen, to 130.0 billion yen. The projected operating profit for Technology Solutions has been reduced by 10.0 billion yen. Within that segment, the projected operating profit for the Services sub-segment has been revised up by 3.0 billion yen because of profitability improvements and other factors, but the projected operating profit in the System Platforms sub-segment has been reduced by 13.0 billion yen because of lower projected sales of network products.

The projected operating profit for Device Solutions has been reduced by 10.0 billion yen because of the lower revenue from LSI and electronic components. In addition, 20.0 billion yen in business model transformation expenses that, in the forecast announced last October, were included in the Other/Elimination and Corporate segment have been reallocated to the Technology Solutions segment as 8.0 billion yen in expenses to the Services sub-segment and 12.0 billion yen in expenses to the System Platforms sub-segment, but this reallocation has no effect on the forecast for overall consolidated operating profit.

On account of the downward revision to the forecast for operating profit, the forecast for profit for the

period attributable to owners of the parent has been reduced by 15.0 billion yen, to 85.0 billion yen.

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Implementation Investments

Addnode Group renews SEK 75 million contract with German industry leading car manufacturer

26 January 2016

Addnode Group's subsidiary, TechniaTranscat has renewed the contract with a German industry leading car manufacturer. The projected order value is approximately SEK 75 million over three years.

TechniaTranscat has been supplying products and services to the German car manufacturer for several years. The renewed contract includes a wide set of services to improve the usage of the existing PLM system. The contract, which has an extended business scope, includes consulting, education and support. The major part of the delivery is based on a Service Level Agreement (SLA) delivery model.

“This is a validation of our strong delivery capacity and knowledge within the PLM segment and our strong local presence in the automotive clusters of Germany”, said Jonas Gejer, CEO TechniaTranscat and President Addnode Group PLM.

“Germany is an interesting market with a significant growth over the past years. The acquisition of Transcat PLM last year was a well-considered move to position ourselves as a leading PLM company. This contract is both a strong validation of our offering and an acknowledgement of our competence within the industry”, said Staffan Hanstorp, President and CEO Addnode Group.

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Aridea Solutions Implements PTC ThingWorx® Technology

27 January 2016

[PTC](#) today announced that Aridea Solutions, a provider of software and hardware systems that monitor environmental conditions, has successfully implemented the PTC ThingWorx technology and has begun accruing benefits from the deployment.

Aridea Solutions, headquartered in Charleston, West Virginia, offers a comprehensive suite of solutions that provide its customers in a variety of industries and agencies with real-time, remote access to weather, water, and air information for the purpose of lowering their compliance-related costs.

The company's cloud based, software-as-a-service (SaaS) solutions are marketed to the extractive, chemical, and utilities industries. These solutions are solar powered, and consist of sophisticated software, sensors, and, now, embedded PTC ThingWorx technology.

“When we founded Aridea Solutions, we envisioned a time when environmental parameters would be monitored in real-time and communicate with each other, machines, and people to help deliver better outcomes for our industries and the environment in which we live,” said BJ Evans, co-founder and managing director, Aridea Solutions. “That time is now – and it's accomplished today with our suite of hardware and software that allows operators and executives the ability to monitor and control their remote and mobile assets from any internet connection. The PTC ThingWorx technology is the cornerstone of our offering.”

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Aridea selected PTC ThingWorx several months ago after an exhaustive due diligence process. The implementation of the technology was completed in weeks. “Benefits accrue each day,” continued Mr. Evans.

“Today, PTC delivers a powerful IoT tech stack, comprised of a rapid application development platform, connectivity, analytics capabilities, augmented reality, and more,” stated Rob Gremley, Group President, The Technology Platform Group, PTC. “We are honored to have been selected by Aridea for such an important IoT initiative – and commit to our customer’s success.”

“PTC has emerged as an IoT powerhouse,” stated Stephanie Atkinson, CEO of Compass Intelligence. “Its big vision, robust tech stack, advancement through strategic acquisitions, and market dominance make the company a clear choice for any company with a need to capitalize on the Internet of Things and achieve improvements in efficiency, reductions in cost, and the evolution of new business models.”

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Centric 8 PLM Selected to Optimize EIN Management

26 January 2016

Centric Software's Product Lifecycle Management (PLM) solution will be used to power the brands of Shenzhen EIN Clothing Co., Ltd. (EIN Clothing) which aims at high quality, high value and high creativity.

Established in 2002 and headquartered in Shenzhen, EIN Clothing boasts two brands: EIN and PURE •TEA, for which it designs, develops, manufacturers and sells exclusively. EIN, which stands for Elegance In Nature, combines simple design and innovative craftsmanship, and was created by brand founder Ye Lin. EIN operates over 300 stores in China, 20 of which offer PURE •TEA which is a relatively new brand.

As a domestic leader in designer women’s wear, EIN strives to optimize internal management to carefully guard its brand DNA, shorten time to market and improve product quality. EIN also wishes to enhance management in product planning, design research and development, materials and fabric development, as well as other operations.

"We hope to optimize our management with PLM and therefore be more competitive in the market," said Ye Lin, the founder of EIN Clothing. "Our major concerns were about the design and development process: product planning, creative design, product R&D, and materials and fabrics development. The Centric team fully understands our business and was able to tailor the solution to our needs."

As a designer women’s wear brand with an excellent design research and development team and rich hands-on experience, EIN attaches great importance to creative design. Centric 8 PLM will enable EIN to better manage its design assets, while facilitating the collaboration and communication between upstream and downstream teams, thus helping to inspire creativity.

For product research and development, Centric will help EIN build a PLM design management platform and a standard mechanism for managing creative designs to improve productivity and cost-effectiveness. A standardized library of materials and fabrics allows EIN to reliably manage vendors, maintain the consistency of materials and styles, and monitor development risks and delays in real time.

"Centric has delivered a first-class product management solution to us," commented Ye Lin on EIN's cooperation with Centric. "By using PLM as the backbone of our product strategy, we expect to manage

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our offering at an enterprise level and apply this platform to even more brands."

"I'm delighted to call EIN a partner, as we share the value of innovation for our products and customers," adds Chris Groves, president and CEO of Centric. "We really look forward to innovating together with EIN."

EIN (Elegance In Nature) is a Chinese designer brand. Bringing together northern European design concepts of nature and rebellion, the brand's latest collection highlights quality, not vanity. EIN was created in 2002. Shenzhen Vi-ein Fashion Stock Co. Ltd owns EIN and counts 200 stores in 110 cities across China.

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Glamorise Selects BlueCherry

27 January 2016

CGS, a global provider of business applications, enterprise learning and outsourcing services, today announced that Glamorise Foundations, Inc., a designer and manufacturer of bras for full-figured women, selected [BlueCherry® Enterprise Resource Processing Suite](#) (ERP) to support its sales expansion, purchasing and sourcing growth, and supply chain processes.

After reflecting on its continued global expansion, Glamorise sought a solution to support the purchasing and sourcing for its expanded selling platform. While considering BlueCherry ERP to support its sales channel growth, Glamorise also discovered the added value the solution could bring to its supply chain processes, offering a single system of support for customer orders, electronic data interchange (EDI) and more. The CGS BlueCherry ERP solution will arm Glamorise with the tools needed to support its continued growth and will create a single system for supply chain and process management.

"When we outgrew our legacy system, we knew we needed a trusted solution to support our global growth," said Jon Pundyk, CEO, Glamorise. "With BlueCherry's market-leading reputation along with its robust and customizable tools, we knew that its ERP solution suite was the best choice to support our purchasing and sourcing functions while also enhancing our supply chain processes with a single solution."

"With extensive retail industry experience, CGS understands the importance of having the right tools and technology in place to effectively grow and support businesses such as Glamorise," said Paul Magel, president, Business Applications and Technology Outsourcing at CGS. "We are excited to welcome Glamorise to our BlueCherry community as the brand expands its purchasing and sourcing sales channels and works to enhance its supply chain and warehouse processes globally."

Glamorise Foundations, founded in 1921, is the world's oldest brand dedicated exclusively to serving full-figured women. Glamorise products are sold world-over and are renowned for exclusive fit technology that provides the best in support and comfort for full-figured women. Glamorise is recognized as the inventor of the sports bra, and Glamorise Sport, the company's sports bra line exclusively for full-figured and full busted women is a best seller world-over.

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JOTNE Selected By Lockheed Martin To Develop System For Open Simulation Data

28 January 2016

Lockheed Martin awarded Jotne a three-year program to develop its existing software system known as Open Simulation Data Management (Open SimDM) platform to include new capabilities in test data management and other application areas.

Jotne's software EDMopenSimDM™ is a key element to achieve interoperability and long-term data retention of CAD/CAE/PLM and test data, supporting Lockheed Martin and its customers to perform data exchange, sharing and archiving of product data. Execution of this collaborative effort will introduce new advanced capabilities, which goes beyond what is available in other software systems. Data which includes 3D product information, simulation models and test data, will be accessible throughout the product lifecycle. Specifications, parts information, simulation and test data integration will be stored long-term using international ISO 10303 standards.

"Jotne's new contract reaffirms our partnership and our role as a leading supplier in Product Lifecycle Management (PLM) and Simulation Data Management (SDM)," said Jotne's Vice President Kjell Bengtsson. "Jotne has delivered technical IT solutions to Lockheed Martin for more than 15 years, and during the last three years it has supported the F-35 program to exchange PLM information between Lockheed Martin Aeronautics and the new Alenia (FACO) facility in Italy."

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Modeling and Simulation: Physics and Math Become a Design Tool

27 January 2016

There's a new way of doing mechanical engineering, and Michigan Technological University is taking steps to make sure that their students come out of school skilled at using the new technology.

HyperWorks® modeling and simulation software developed by Altair, a technology and services company that focuses on business and engineering innovation, is delivering a new class of design tools for tomorrow's engineer. And Michigan Tech is one of the first engineering schools to incorporate this commercial suite of computer-aided engineering software into its entire mechanical engineering curriculum.

The software enables engineers to do simulation-driven design, which takes the place of prototyping, testing and prototyping again. "It's faster and cheaper," says Associate Professor Chuck Van Karsen, who teaches the new Altair software. "Students are learning to make better decisions without as much guesswork."

Now, instead of guessing what their engineering project should look like, building it, testing it to see what doesn't work, going back and building it again, engineers — and Tech engineering students — are sitting down to their computers, where they enter the parameters, and the software does the complicated math and physics for them, generating a colorful, three-D model that they can virtually test, explore, and alter over and over.

"It's more than a tool," says Altair's chief operating officer, Brett Chouinard, a Michigan Tech alumnus. "Industry is using simulation to drive innovation and the direction of product design."

Take virtual crash testing, for example. "We can evaluate hundreds of design variations through optimization to improve passenger safety without having to do hundreds of physical [vehicle] crashes," Chouinard explains. "We can build and run a virtual model in 24 hours that would take months to build

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and test physically.”

Michigan Tech has a lot of ties to Altair—Chouinard, the company’s chief operating officer, serves on the ME-EM Advisory Board; another alumnus, Michael Heskitt one of Altair’s Chief Technical Officers and yet another alumnus, Erik Larson, is an Applications Engineer and Training Manager.

Bill Predebon, chair of Michigan Tech’s Department of Mechanical Engineering-Engineering Mechanics, uses a lot of modeling and simulation in his own research, so he’s been following Altair’s pioneering efforts on that front closely. He visited Chouinard a couple of years ago, “and I was very impressed with the optimization capabilities of their simulation software,” he says.

Predebon returned to Tech determined to make Altair’s simulation software a cornerstone of his curriculum. He found enthusiastic advocates in Van Karsen and Jim DeClerck, a professor of practice in mechanical engineering.

“We want to teach skills that the students are going to need on the job,” says Van Karsen. “This solves the physics problem. It does the math for the students, does it accurately and does it fast.”

In other words, the technology transforms a physics and math problem to be solved into a design tool, allowing students to apply their engineering knowledge and creativity to explore solutions to meet complex design challenges.

DeClerck, who worked in industry, says the software “brings a dose of reality to engineering education. In industry, the question comes down to, is your customer happy or sad? And there’s no equation for that.”

Last year, ME-EM incorporated Altair’s simulation software into its second-year curriculum. This year, second and third-year students are using it. By next year, it will be a pervasive tool from the second through fourth year of mechanical engineering studies.

Second-year students use the Altair software to model and predict the deflection of a truss bridge. Then they build a plastic model of the bridge and compare their results to the software’s. Following that static design project, the students design and model a crane, with its additional dynamic challenge of weight and mass that is swinging around.

Third-year students are using Altair to model an even more challenging project. They are simulating and building a “Harry Potter elevator” that goes up, then moves sideways, then goes up again.

The simulation projects all feed into ME-EM’s signature Senior Capstone Design program during the mechanical engineering students’ final year.

The new simulation approach is a sea change for mechanical engineering. “When I was a student in the late ‘80s, I might have had one class that touched on simulation,” says Chouinard. Van Karsen agrees. “I’ve been an engineer for 40 years, and I certainly didn’t grow up this way,” he says.

But both believe that the new simulation-based curriculum will prepare engineering students for the workplace that awaits them. “This is a special opportunity to integrate a tool into the curriculum that is beginning to be more and more important in industry,” Chouinard says.

Many engineering schools are using Altair software, but Michigan Tech is the first to incorporate it the entire mechanical engineering curriculum. Chouinard hopes others will follow.

“Employers are saying, ‘We need students to come out of university with these skills,’” he points out.

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Organic Design Meets Ergonomic Furniture

27 January 2016

Latin American design firm [BarriosEscudero](#) sees every project as an opportunity to combine technology, materials, and fabrication techniques to create structures that prevent wastefulness during construction. To do so, they avoid cookie-cutter solutions and seek out personalized responses to every challenge they face. Interested in seeing what the office has created using this design philosophy? If you've visited the [Vectorworks 2016 webpage](#) and explored our Subdivision Surfaces feature, you might have already seen one of their projects: the Pabellón Ricchezza.

Commissioned as part of the International Furniture Fair of Argentina (FIMAR) Exposition, the Pabellón Ricchezza, or Ricchezza Pavilion, takes inspiration from the flow of ergonomic furniture design. The husband and wife design team at BarriosEscudero set out to represent the organic movement of wood grain through a sculpted piece, and the resulting pavilion creates a differentiated space that provides privacy and comfort on a bustling show floor while simultaneously promoting the power of medium-density fiberboard (MDF) as an interior design material.

“The Ricchezza Pavilion creates a space that combines art and function in an uncommon way,” says Luis Ruiz, architectural industry specialist at Vectorworks. “It isn't something that you see everyday, which is why it really spoke to our team when we sought inspirational projects to model that could demonstrate the new features in our latest design software release, Vectorworks 2016.”

BarriosEscudero created the pavilion by modulating standard-sized pieces of MDF using an industrial-grade, 5-axis CNC router. By constructing it in this way, none of the MDF material was wasted as each side of the pavilion is one-half of the overall fiberboard, creating undulating waves of complementary curves.

“We used to combine a number of digital applications to bring our ideas to life, especially for intricate designs like the Pabellón Ricchezza that require CNC equipment,” Barrios says. “However, now that we have Vectorworks software, we're discovering that all the tools and functions we need to execute on an idea actually exist within one, integrated environment.”

With their upgraded design solution, the team at BarriosEscudero is working more efficiently and comprehensively toward fulfilling their design mission: imagining unconventional, economical solutions and transforming them into reality, creating structures that are as beautiful to look at as they are to experience.

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Trace One and Musgrave Group renew contract to drive further private label success

25 January 2016

Trace One today announced that Irish retail leader Musgrave Group has renewed its agreement for Trace One's Product Lifecycle Management (PLM) solution. Musgrave leverages Trace One PLM to effectively manage its private label ranges from ideation and specification management through to final packaging and approval. As owner of one of Ireland's most trusted brands, SuperValu, Musgrave has established a strong reputation for local provenance and quality. The continuing deal will help Musgrave work with multiple local suppliers and seamlessly manage their brands, while preserving their reputation and growing consumer trust.

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“Own brand products are an important part of our business,” said Pádraigh Cronin, group own brand manager at Musgrave. “Since implementing Trace One PLM we have seen consistent 6-10% year-on-year growth in own brand sales, which now contributes 30% of Group revenue. Trace One PLM has proven to be the ideal solution for this success, allowing us to innovate and expand ranges with a strategic focus on quality and local provenance. We have built on the value of our partnership with Trace One and look forward to working with them further in the future.”

Musgrave has 259 SuperValu stores in Ireland and operates several retail chains across Europe, including Centra, Dialprix and Daybreak. Musgrave first chose Trace One PLM in 2011 to help manage its new and existing product development projects. In particular Musgrave used Trace One PLM to develop and launch the SuperValu private label range, now comprising 1,800 lines, which in 2013 contributed to SuperValu being named as Ireland’s most reputable brand. Trace One PLM has given Musgrave greater control and visibility over its product development process: consolidating product specifications across various divisions and providing a single view and format to monitor the content, labelling and status of all goods it sells. The complete transparency offered by Trace One PLM allows Musgrave to respond quickly to any potential problems with products in real-time, collaborate more effectively with local manufacturers and producers and champion provenance and quality to consumers.

“We are very pleased to be renewing our relationship with Musgrave, owner of some of the most trusted household names in European retail,” said Shaun Bossons, EVP global business development at Trace One. “Trace One powers the world’s largest network for the FMCG industry with more than 20,000 companies worldwide, helping them to easily collaborate with partners, comply with the latest regulations and exceed industry standards on quality and provenance. We believe this gives us the perfect base of knowledge and talent to work with Musgrave, to help them collaborate more effectively with partners and further engage with consumers through innovative new ranges.”

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Product News

Announcing AgileXPLOER Now Part of Oracle’s Agile PLM Engineering Collaboration Module

26 January 2016

Perception Software announces the release of AgileXPLOER as part of Oracle’s Agile PLM Engineering Collaboration Module. AgileXPLOER was designed to give everyone in the product supply chain a high performance way to both navigate and discover key product data housed in Agile PLM for making better and faster product decisions. AgileXPLOER is available immediately from Oracle.

“As a longtime Agile PLM administrator, it is clear that our users need functionality that lets them quickly navigate a multitude of objects within the Agile PLM system in order to gain visibility into critical product design decisions,” said Jerry Baker, Sr. Mgr., EIT Applications and Solution Delivery at Haemonetics. “AgileXPLOER will allow our users to do just that.”

“We believe Perception hit the mark in their creation of AgileXPLOER for our user base,” said Shane Goodwin, Director of Product Management for Oracle Agile PLM. “Feedback from our customer base matches the deliverable from AgileXPLOER: fast, easy to use and insightful discovery.”

If you would like to know more about AgileXPLOER or if you are an existing Oracle Agile

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Engineering Collaboration customer, please contact your Oracle sales representative. For more information on AgileXPLOER capabilities please visit www.perceptionsoftware.com. AgileXPLOER is offered as either an on premise or hosted cloud offering.

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ANSYS Unveils release 17.0

27 January 2016

Engineers across disciplines – from structures to fluids to electromagnetics to systems – will realize step-change improvements in the way they develop products using the newly released ANSYS® 17.0. This next generation of [ANSYS](#) industry-leading engineering simulation solutions set the scene for the next quantum leaps in product development, enabling unprecedented advancements across an array of industry initiatives from smart devices to autonomous vehicles to more energy-efficient machines. The most feature-rich release in the company's 45-year history, available today, delivers 10x improvements to product development productivity, insight and performance.

Simulation has been identified as one of the key pillars of the next industrial revolution, known as Industry 4.0. With the advent of the Internet of Things all products are getting smarter, new advanced materials are enabling lighter, stronger and more sustainable designs, and additive manufacturing enables users to 3-D print anything they can imagine. Unlocking the power of these trends is impossible without simulation tools' ability to virtually explore these vastly increased options to arrive at the winning designs of tomorrow.

Evaluation of thermal forces provides deeper insight into the performance of a CPU Cooler using ANSYS 17.0

"Companies are under relentless pressure to create top-line growth and increase savings," said Jim Cashman, president and CEO of ANSYS. "Innovation, time to market, operational efficiency and product quality are key factors that contribute to this business success. ANSYS is focused on helping customers improve their critical business metrics and leapfrog the competition by improving their product development process through engineering simulation. When we set out to develop the next release of our simulation platform, we challenged ourselves to improve our customers' product development process by a full order of magnitude, or 10x."

"Hyperloop Technology is accomplishing safe and reliable ground transportation at close to the speed of sound," said Josh Giegel, vice president of design and analysis, Hyperloop Technologies. "ANSYS 17.0 technology offers deeper insight into our designs and enables us to make the necessary improvement to our development process, which in turn will help us realize the Hyperloop concept."

"ANSYS has been an acknowledged leader in enabling simulation-driven design over the past several decades, and ANSYS 17.0 release is a major step forward in terms of bringing together all of the ANSYS modeling and simulation capabilities required to achieve the vision of an integrated yet open enterprise product innovation platform driven by behavior modeling and simulation," said Peter Bilello, president of [CIMdata](#). "As industry moves ahead over the next decade to realize the vision and promised benefits of Model-Based Systems Engineering in the context of mega-trends such as the Internet of Things (IoT), Industry 4.0 and the Circular Economy, ANSYS' product portfolio and M&S platform is well positioned to meet the multi-domain requirements for developing complex cyber-physical systems with ever increasing levels of software and electronics content."

Highlights of the release include:

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10x Improvements to Productivity. ANSYS 17.0 delivers solutions faster so engineers and designers can make more informed decisions sooner in the product development cycle. That enables organizations to rapidly innovate and bring products to market faster, while getting more productivity from their existing engineering assets.

Through tighter integration of semiconductor and electronics simulation solutions, ANSYS 17.0 delivers a comprehensive chip-package-system design workflow. New capabilities for automated thermal analysis and integrated structural analysis deliver an unequalled chip-aware and system-aware simulation solution, enabling customers to deliver smaller, higher-power density devices to market faster. With the advent of the Internet of Things, more products and engineers will rely on these capabilities.

In the fluids suite, ANSYS continues its technology leadership with breakthrough advancements in physics modeling and introduces new innovations across the entire workflow and user environment design to accelerate time to results by up to 85 percent without compromising accuracy. Improvements to workflow and meshing enable novice users to quickly become productive while new tools and options expand the application reach for experienced users.

"ANSYS has broken through by truly integrating multi-domain 3-D meshed solutions," said Brad Kramer, director of engineering at HUSCO International. "By closely integrating the fluid and the mechanical interfaces, we are now able to simulate and gain insight into the real physics of the problem without having to set up artificial boundary conditions."

Preprocessing – or the act of setting up simulations – with ANSYS 17.0 has also improved by an order of magnitude. Using the direct modeling tools in ANSYS 17.0, users can prepare their geometry for analysis faster than traditional computer-aided design (CAD). Save and load times for complex models, as well as the performance for common geometry editing functions has increased by up to 100 times. ANSYS 17.0 geometry tools also boast tighter integration to ANSYS Workbench and offer many productivity advancements for modeling fabricated and composite structures. Fluids pre-processing for complex systems has also improved dramatically. The process of preparing and meshing models with hundreds of parts has been reduced from days to hours with ANSYS 17.0.

ANSYS 17.0 enables software engineers to be more productive with developing, testing and certifying embedded software. New industry-specific vertical solutions take full benefit from the openness and flexibility of the platform to facilitate interactions with original equipment manufacturers and suppliers while adhering to such industry standards as ARINC 661/664, FACE and AUTOSAR.

10x Improvements for Deeper Insight. ANSYS 17.0 delivers deeper insight into real-world product performance through such enhancements as higher fidelity simulations and better post processing. For example, with printed circuit boards, engineers can now quickly import ECAD geometry and perform coupled thermal-structural analysis with power integrity and electronics cooling analyses to accurately predict stress, deformation and fatigue. These capabilities enable engineers to design board layouts and thermal management strategies for more reliable electronic components. As a result, complex board and packages can be set up and solved in minutes, not hours or days.

As products become more complex, the ability to simulate entire systems provides a significant advantage to manufacturers. Using a single simulation platform at ANSYS 17.0, engineers can not only simulate physical models but can also consider embedded systems design and embedded software models. This enables virtual systems simulation, testing and prototyping, reducing product development time and cost. In this release, ANSYS introduces native support for the industry-standard system

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modeling language, Modelica, which enables access to hundreds of additional mechanical and fluid component models in addition to its rich model library for power electronics. At the same time, advancements in the platform provide more insight to real world system performance by enabling high-fidelity 3-D results to be incorporated into system-level models.

ANSYS 17.0 greatly expands turbomachinery simulation capabilities across a broad spectrum to produce highly accurate results, across a wider array of operating conditions and with shorter turnaround time. Engineers can solve considerably more transient blade row configurations by calculating as few as one blade per row instead of the full wheel to speed time to solution by over 10x and drastically reducing the required computing resources. These advances are critical given that turbines produce 99 percent of the world's electricity.

10x Improvements to Performance. ANSYS 17.0 delivers performance improvements for all of its product lines, particularly in the realm of high-performance computing (HPC). ANSYS 17.0 introduces the most modern HPC solver architectures that leverages the latest processor technologies. Organizations can leverage this power on most IT configurations – from desktops to cloud environments – to obtain their simulation results sooner.

There is a clear global demand to develop more power efficient machines, but progress has been hindered due to the huge computational resources required to simulate an electric machine. Complete transient electromagnetic field analysis of an electric machine can require two weeks or more to complete. HPC advances in the ANSYS 17.0 electromagnetics suite deliver unprecedented computational speed for full transient electromagnetic field simulation for electric motor design. Simulations of critical transient behaviors that previously required weeks of computational time can now be completed in hours during early design stages, reducing the risk of project delays and late-stage design changes.

"This is amazing technology," said Briam Cavalca Bork, product engineer at WEG. "ANSYS 17.0 allows us to fully utilize our HPC hardware. Simulation time has improved by a factor of 20x, but more importantly we have gained more in-depth and timely design insight that will allow us to deliver industry leading, innovative machine designs. The new ANSYS technology delivers the capability to do more complex analyses on a greater variety of scenarios."

As previously [announced](#), ANSYS fluids solutions have smashed the previous simulation world record by scaling to 129,000 compute cores running at 90 percent efficiency – a 10x improvement over the past two years. HPC performance of the structures suite has also improved significantly and now demonstrates scaling up to 1000 cores. Structural simulations which required running overnight, can now be completed in an hour, enabling engineers to explore 10x more variations and find the best design faster.

"Organizations across a wide variety of industries are struggling to keep pace with the growing need for data-intensive modeling and large-scale simulations to accelerate business innovation," said Scott Misage, vice president and general manager, High Performance Computing, Hewlett Packard Enterprise. "By bringing together all high-performance computing (HPC) advances made in the new ANSYS 17 release with our industry-leading HPE Apollo compute platform for HPC and big data workloads, our customers can now transform their product development processes, reduce engineering costs and accelerate time-to-market."

"Our partnership with ANSYS has always equipped us with exceptional simulation capabilities, which have allowed us to design and develop our cars more quickly, efficiently and intelligently," said Nathan

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Sykes, head of numerical tools and technologies, Red Bull Racing and Technology. "The ANSYS 17.0 fluids suite has been used extensively in the design of our 2016 challenger, the RB12, allowing us to conduct critical CFD analysis and make design decisions faster than ever before."

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CAM Software emphasizes programming task automation

28 January 2016

MecSoft Corporation, the developer of industry leading CAD/CAM software solutions, has announced the availability of VisualCAM 2016 for SOLIDWORKS, the latest version of MecSoft's integrated Gold Certified CAM solution for SOLIDWORKS.

VisualCAM 2016 for SOLIDWORKS includes 2 CAM modules known as VisualCAM-MILL for SOLIDWORKS, and VisualCAM-TURN for SOLIDWORKS, each of which run integrated inside the SOLIDWORKS CAD program and can be bought and licensed independent of each other. The 2016 version includes enhancements to 2 Axis, 3 Axis and 4 Axis milling methods, Tooling, Feeds/Speeds and Knowledge Bases and more.

"Just as with our recent release of RhinoCAM 2016 and VisualCAD/CAM 2016, this product improves upon a CAM product that consistently exceeds expectations of our users. With an emphasis on automation of programming tasks in this release, along with our continued focus on improving our toolpath generation methods, we are proud to release this product to our customers."

Stated Joe Anand, President and CEO of MecSoft Corporation.

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ESI Releases the Newest Version of Flagship Software Virtual Performance Solution 2015

27 January 2016

Mr Eisei Higuchi, Chief Engineer, HONDA R&D Co. Ltd, states: "HONDA R&D has been using ESI's Virtual Performance Solution for over 20 years. Today, we are leveraging the capacities of Virtual Performance Solution's single-core model on a full car for our latest vehicle platform development. The consistent chaining of virtual manufacturing results and virtual performance - not only for crash and safety domains but also for NVH and durability - is a definite technological breakthrough. Virtual Performance Solution enables us to ensure the right levels of product performance for lightweight design, and to face challenges related to evolving regulations." Relative to the newest features added to Virtual Performance Solution, Mr. Higuchi continues: "We look forward to implementing ESI's advanced water management solutions and to benefiting from the latest enhancements of Virtual Performance Solution, especially regarding NVH."

ESI's [Virtual Performance Solution 2015](#) delivers new functionalities that extend virtual testing capabilities across multiple domains, while improving Computer-Aided Engineering (CAE) process efficiency. For instance, the improved High Performance Computing efficiency for the full NVH (Noise, Vibration & Harshness) chain enables users to investigate larger NVH models in more details, including the complete car trim interior.

Additionally, ESI's [Virtual Performance Solution](#) includes features relative to modular input, to allow CAE teams to organize models in a more flexible way. By supporting increased model granularity, the modular input function is better adapted to end-to-end Virtual Prototyping processes, allowing engineers

to refine models as they advance along the product development phase.

Furthermore, new improvements for chaining manufacturing results with performance testing empower industrial manufacturers, from early on in the product design stages, to predict the impact of manufacturing effects onto product performance.

Thanks to the new Water Flow simulation capabilities in VPS, automotive manufacturers can now predict how water is drained around different parts of the car. Indeed, [Virtual Performance Solution 2015](#) enables the virtual testing of water flows on sealing, closure and car body, in order to improve seal design and thus prevent water leakages. By coupling this new capability with crash simulation, automotive manufacturers can also anticipate tank sloshing effects.

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Geometric announces ‘Machine to the Mean’ capabilities for CAMWorks 2016

28 January 2016

[Geometric Limited](#) today announced the addition of automated ‘Machine to the Mean’ capabilities when working with SOLIDWORKS® parts and assembly files that contain tolerance— or geometric dimensioning and tolerance (GD&T)—information. These automated mean tolerance calculation capabilities will eliminate the common practice of having to manually calculate allowances when defining CNC tool paths or the need to rebuild 3D models to mean geometry, thus eliminating potential mistakes, while saving time and money, and streamlining the transition from design to manufacturing.

Available through an upcoming, second-quarter 2016 point release of CAMWorks® 2016 software, the new ‘Machine to the Mean’ capabilities eliminate long-standing issues surrounding differences between design practices required to tolerance parts based on fit, form and function vs. manufacturing’s need to machine geometry based on mean dimensions and tolerances. CAMWorks 2016 is the only mainstream CNC application that can calculate the mean tolerance and automatically generate the correct information for tool path generation.

“Every part or assembly that has tolerances designed for specific functional requirements—such as slip fits, press fits, etc.—require tolerance specifications that have different upper and lower or asymmetric limits,” explains Jim Foster, Vice President of Global Channel Sales & Marketing at Geometric. “This has long caused extra work for manufacturing professionals because parts are machined to a nominal dimension using methods and tools that provide an equal resulting tolerance on each side of a mean dimension. For years, CNC programmers have had to manually calculate mean dimensions and tolerances and then offset edges and surfaces in the manufacturing model or, rebuild 3D parts to take this into account, a practice that is time-consuming and prone to error.”

“With this new capability, CAMWorks 2016 software will automatically calculate the mean dimension and required tolerance for manufacturing and then use this information to select the correct tooling, machining strategy, and generate the toolpath.” Foster stresses. “The impact of this solution is that

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CAMWorks users won't have to rebuild models or add offsets anymore because they will be able to machine to the mean automatically, saving time, reducing costs, and improving quality."

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Geometric introduces SOLIDWORKS® MBD 2016 support at SOLIDWORKS World

29 January 2016

[Geometric Limited](#) announced the addition of automated manufacturing support for SOLIDWORKS® MBD 2016 technical communication software, which provides product manufacturing information (PMI) and geometric dimensioning and tolerancing (GD&T) instructions in 3D, to its CAMWorks® 2016 CNC machining application. These new capabilities for the joint SOLIDWORKS/CAMWorks CAD/CAM platform further streamline design and production processes, enabling a seamless transition from design to manufacturing for the first time in SOLIDWORKS design environments, as well as supporting drawingless design and manufacturing by eliminating the need to generate, store, and maintain 2D engineering drawings.

Available through an upcoming, second-quarter 2016 point release of CAMWorks 2016 software, which is fully associative to SOLIDWORKS 3D design geometry as a certified SOLIDWORKS Gold Partner, these new CAMWorks MBD-related capabilities will enable manufacturers to obtain the information required to machine a part—including tolerances, thread data, surface finishes, and other and GD&T information previously only available on a drawing—from the SOLIDWORKS design file and then generate the tool paths to produce it, eliminating the need to refer to traditional drawings.

Using the dimensions, tolerances, thread data, model, and surface finish data from the SOLIDWORKS MBD-enabled file, CAMWorks 2016 will extract machinable features and MBD information, map that data to manufacturing features and use the operation and strategy that is associated with the feature, tolerance, thread data and surface range, to automatically generate the operations and toolpaths to machine the part. If the model or tolerances change, the strategies and toolpaths will update automatically to meet the new requirements.

"Automating the transition from design to manufacturing, allowing the information in the design model to automatically drive selections of tools and generation of tool paths, and helping manufacturers minimize their reliance on paper drawings have long been the future goals of CAD/CAM technology," says Jim Foster, Vice President of Global Channel Sales & Marketing at Geometric. "With the addition of MBD production capabilities to CAMWorks 2016—and its integration with SOLIDWORKS MBD 2016 software—the future is now."

CAMWorks, a parametric, solids-based CNC programming software system, brings in a revolutionary way to help machinists around the world program smarter and machine faster. CAMWorks significantly reduces programming time and removes the drudgery from CNC programming by using patented Feature Recognition technology in conjunction with full toolpath to solid-model associativity and knowledge-based machining. For more information, go to www.camworks.com.

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Geometric launches NESTINGWorks 2016 at SOLIDWORKS World

28 January 2016

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[Geometric](#) Ltd. today announced the release of NESTINGWorks™ 2016 3D nesting software for automatically nesting layouts of SOLIDWORKS® parts and assemblies for production. This new 3D nesting application is seamlessly integrated within SOLIDWORKS 2016 software, enabling automated nesting of flat or 3D part or assembly models made from sheet stock, including sheet metal, plates, plastics, composites, or wood.

NESTINGWorks software leverages Geometric's industry-leading NESTLib® true-shape 3D technology—known to nesting application developers worldwide as one of the fastest and most fully featured automatic true-shape nesting libraries available in the industry. With NESTINGWorks, product designers can efficiently optimize sheet-stock layouts—including specifications for grain direction—so they can produce the maximum number of parts from a single piece of raw material in a matter of minutes, saving time, while simultaneously minimizing material usage.

“The combination of SOLIDWORKS design, NESTINGWorks nesting, and CAMWorks® machining software provides us with a real competitive advantage because we can cut higher quality parts on our laser cutter in less time while optimizing material usage,” says Mike Buchli, Vice President of Karl W. Schmidt & Associates, a leading manufacturer of custom recycling systems. “Because CAMWORKS and NESTINGWorks are integrated inside SOLIDWORKS, the time and cost savings associated with the seamless process enable us to reduce our prices significantly, which helps us win more business.”

Unlike other nesting applications that use 2D layouts, NESTINGWorks software provides 3D true-shape layouts, which lets designers nest parts of varying thicknesses. The solution is also compatible with all downstream machining and manufacturing applications. Combined with SOLIDWORKS design configuration tools, designers can use NESTINGWorks to nest multiple sets of assembly and or part variants, from a single SOLIDWORKS model.

Productivity-enhancing features of the software include:

- Single dialog box ease of use
- Fully automatic true-shape nesting solution, to optimize placement of parts on sheet
- Automatically nests multiple parts, based on the material and thickness, thus eliminating the manual effort of segregating individual parts
- Part-in-part nesting to fully optimize material usage
- User specified grain direction to easily manage required material properties
- Full associativity with SOLIDWORKS software. Updates are tracked, and flagged whenever a change is made to the component and are reflected instantly

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Lectra releases DiaminoFurniture V6R2

27 January 2016

Lectra is pleased to announce DiaminoFurniture V6R2, the latest version of its marker-making solution for upholstered furniture. This new release expands the scope of automated marker-making capabilities, accelerating the product development process, delivering higher quality finished products and

maximizing material saving in the cutting room.

Today, consumers demand furniture that reflects their lifestyle. They want sophisticated pieces in an infinite variety of colors and fabrics, with ever-shorter lead times. Manufacturers must therefore constantly renew their offer, making it difficult to remain profitable and competitive, as they have to create and manage a greater number of increasingly complex markers to fulfill orders on time and on budget.

DiaminoFurniture is a key element of Lectra's end-to-end furniture offer, using automation to accelerate the pre-production process, and removing time-consuming, repetitive manual tasks.

For manufacturers, the situation is further complicated by rising fabric costs, driving them to find less costly alternatives to protect margins and maintain competitiveness. Cheaper materials are more likely to contain flaws, such as differences in shading for plain fabrics and variations in pattern repeats, increasing waste and reducing profitability. "This growing demand for broader choice and more frequently renewed models puts upholstered furniture manufacturers under enormous pressure. They have to find new ways to get their products to market faster and reduce costs," says Céline Choussy Bedouet, Chief Marketing Officer, Lectra. "Because fabric accounts for up to 40% of furniture's cost price, efficient marker-making, which optimizes material use, gives a real competitive advantage," she explains.

This latest version of DiaminoFurniture delivers additional fabric savings of 1.1% compared to previous versions, which already used cutting-edge technology. For example, in the case of a Lectra customer using 350,000 meters of fabric a year with a purchase price of 30 Euros per meter, the saving obtained through optimized marker-making would amount to €15,500 annually.

DiaminoFurniture's powerful algorithm simulates multiple marker options, extracting the maximum from each fabric roll. Marker simulations can be run in batches, in hidden time or even overnight for improved efficiency. The solution can also give accurate cost estimates very early in the product development process, ensuring that all proposed models meet cost targets. This accelerates product development and keeps the need for expensive physical prototypes to a minimum, generating significant savings as each physical prototype can cost up to five times as much as the finished model itself. Quality is enhanced as fabric flaws, shade and pattern repeat variations are now taken into account automatically, reducing costs and saving time in the cutting room.

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MachineWorks Simulation Software v7.4 Released

28 January 2016

MachineWorks announces that today, the much anticipated MachineWorks version 7.4 is being released.

MachineWorks component software is at the forefront of the development of advanced 5-Axis simulation and collision detection technology, providing simulation and verification solutions that are integrated by the leading CAM system providers, CNC machine tool builders, and CNC control manufacturers across the world.

Among the many new features, hybrid machine tool simulation, higher quality surface finishing and greater accuracy of visual representation are some of the main highlights.

New Hybrid Manufacturing Simulation

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The ability to simulate both Additive Manufacturing and Subtractive Manufacturing in a single environment is also featured in v7.4. The simulation of Hybrid Manufacturing Processes is an addition that has certainly got many of our customers excited. MachineWorks have always been able to deliver material addition as well as material removal but recently we have seen the demand for additive simulation rocketing.

MachineWorks have been integrated in leading CAD/CAM applications since 1994, now, with more and more hybrid CNC machines being brought to market, MachineWorks is offering the software needed to simulate the material deposition as well.

The unique feature about MachineWorks is the degree of flexibility and customisation offered to the Hybrid Manufacturing processes through the different APIs. The Boolean operations to calculate material removal work in reverse to add the material. Whether it is layer by layer addition or cutting material on the same stock, MachineWorks simulates the complete hybrid manufacturing process.

Version 7.4 is the culmination of several years of research and development. It provides much improved finished surface quality thanks to a new algorithm for 5-axis swept volume generation.

The innovative MachineWorks development team have managed to achieve both higher quality and faster performance in 5-axis simulation without compromising on accuracy or stability with the revolutionary 5-Axis algorithm.

The new 5-axis swept volume method allows more flexible quality optimisation, which further enhances the finished surface accuracy and performance in terms of CPU time and number of faces of the stock after simulation.

Furthermore, the new sampling engine offers greater accuracy of graphical representation whilst maintaining great performance and constant memory footprint throughout the simulation.

MachineWorks' sampling engine manages to retain detail even when zoomed in. The enhanced ray-traced image contains surface details that would normally be lost when using a sampling technology, but thanks to the new MachineWorks development, have been kept.

MachineWorks' customers who were privy to the beta version helped with their contributions to shape v7.4 into its final form. We would like to thank everyone involved in making this release happen.

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PTC Brings Augmented Reality to the Enterprise with Vuforia

28 January 2015

[PTC](#) today announced new features for the Vuforia augmented reality (AR) platform targeted for the enterprise. This includes support for Windows 10 devices and the introduction of the groundbreaking VuMark™ solution for delivering AR experiences to any object.

Recently [acquired](#) by PTC, the Vuforia AR platform is supported by a global ecosystem of over 200,000 developers who have built more than 20,000 apps for phones, tablets and a new generation of digital eyewear. Vuforia has been widely used by consumer brands to market and sell their products.

With the enhancements announced today, the Vuforia AR platform will be able to address the broader enterprise market opportunity. [Goldman Sachs](#) calls augmented reality a disruptive technology for the

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enterprise and a [report](#) from Juniper Research estimates that the use of AR apps in the enterprise will grow to be a \$2.4 billion market in 2019, up from \$247 million in 2014.

“PTC believes the technology has arrived to completely transform the way we interact with and experience things, and that technology is augmented reality,” said Jay Wright, Vuforia general manager & senior vice president, PTC. “Our goal with Vuforia is to deliver an augmented reality experience on top of all types of things - and fundamentally change the future of work.”

With support for Windows 10, Vuforia developers will be able to target a new generation of Windows 10 devices, including Microsoft’s Surface Pro 4 and Surface Book. Developers can use Unity, the leading tool for interactive 3D app development, to build a single cross-platform application that will run on iOS, Android and now Windows 10 devices. Additionally, developers will be able to use Microsoft Visual Studio to add AR functionality to their Windows 10 applications.

AR applications must deliver unique experiences on a wide range of things, such as machinery and manufactured products. VuMark is a universal solution that can deliver a unique AR experience on any object while allowing the design freedom for a custom look and feel. VuMark also provides a simple method for encoding data such as a URL or a product serial number. It overcomes the limitations of existing bar code solutions that do not support AR experiences and can detract from a product’s appearance.

“Today’s announcement leverages two transformational technology trends, the Internet of Things and Augmented Reality, to deliver a new class of products that will fundamentally change the way people interact with products,” said Vernon Turner, senior vice president and research fellow (IoT), IDC. “The Vuforia augmented reality platform will provide an opportunity for organizations to seamlessly overlay digital data on the physical world. This is a game changer because it offers a richer interface to the person who operates the product, and delivers deeper insight into how to service those products.”

Support for Windows 10 and VuMark will be publicly available to all developers this Spring. It will also be available to selected developers as part of the Vuforia Early Access Program. To apply for this program, or to get more information, please go to developer.vuforia.com.

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Synopsys Launches New IP Subsystem to Accelerate Data Fusion Processing in IoT Devices

29 January 2016

Synopsys, Inc. announced the new DesignWare Smart Data Fusion IP Subsystem, an integrated, pre-verified hardware and software IP product optimized for highly efficient DSP performance and ultra-low energy consumption. The Smart Data Fusion IP Subsystem offers a choice of DesignWare ARC EM DSP processors, including the latest EM9D and EM11D cores with support for XY memory to boost signal processing performance. An integrated microDMA controller minimizes system-level energy consumption by enabling data transfers while the processor is in one of several programmable sleep modes. The integrated peripherals, memories, hardware accelerators and software DSP functions deliver the performance efficiency needed for common processing tasks in Internet-of-Things (IoT) applications such as always-on sensor fusion, voice and image detection and audio playback.

"IoT edge devices increasingly require a combination of low-power sensing capabilities and high-performance processing," said Tadaaki Yamauchi, vice president of the Core Technology Business Division at Renesas Electronics Corporation. "Through our collaborative demonstration platform,

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utilizing cutting-edge 40-nanometer embedded flash technology, Renesas and Synopsys show how designers can leverage complementary technologies such as Synopsys' DesignWare Smart Data Fusion IP Subsystem with Renesas' innovative, high-speed embedded flash memory controller IP to develop high-performance, cost-optimized IoT systems in less time."

The DesignWare Smart Data Fusion IP Subsystem is designed to process data from numerous digital and analog sensors with minimal power consumption, offloading the host processor and enabling more efficient processing of sensor data. The fully configurable IP subsystem includes an ARC EM5D, EM7D, EM9D or EM11D processor. This family of power-efficient cores combines RISC and DSP processing and includes support for XY memory banks to enable a sustained throughput of one 32x32 MAC operation (or two 16x16 MAC operations) per clock cycle. The additional signal processing bandwidth is optimized to manage the extensive data processing required by advanced sensor fusion algorithms and to improve processing efficiency for a range of audio formats including MP3, SBC, OPUS and AAC LC. For example, executing codecs such as Bluetooth Low Complexity Subband Coding (SBC) with ARC processors requires less than 40 microwatts of power in 40-nanometer low-power processes with frequency (MHz) requirements more than 25 percent lower than competitive processor offerings.

The subsystem's integrated microDMA controller enables memory and peripheral access during processor sleep modes and provides 4X faster access times compared to traditional bus-based DMA implementations. In addition, the subsystem incorporates highly-optimized I/O peripherals including multiple SPI, I2C and analog-to-digital converter interfaces, further lowering gate count and energy consumption while reducing engineering effort.

To ease software development, the subsystem includes software drivers and a rich library of off-the-shelf DSP functions supporting filtering, correlation, matrix/vector, decimation/interpolation and complex math operations. Designers can implement these sensor-specific DSP functions in hardware using a combination of native DSP processor instructions and tightly coupled hardware accelerators to boost performance efficiency and reduce power consumption. The subsystem is supported by commercially available software covering a range of IoT functionality, including speech recognition, voice control, motion sensing and audio post-processing and playback. Additionally, Synopsys' embARC Open Software Platform gives software developers online access to a comprehensive suite of free and open-source software that accelerates code development for the subsystem.

"Advanced sensor fusion applications require a high level of integration with minimal power consumption and area," said John Koeter, vice president of marketing for IP and prototyping at Synopsys. "The new DesignWare Smart Data Fusion IP Subsystem gives designers a pre-verified hardware/software solution that delivers the additional DSP performance needed to manage specialized tasks like processing sensor information, recognizing voices and audio playback, while meeting the system's power budget. By delivering a complete, pre-integrated IP subsystem, we enable designers to quickly incorporate this key functionality into their IoT devices with significantly less risk and effort."

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Synopsys StarRC Raises the Bar in Parasitic Extraction Performance and Scalability

26 January 2016

Synopsys, Inc. announced that the 2015.12 release of its StarRC™ solution delivers key technology innovations to address the increasing parasitic extraction and signoff challenges arising from Moore's

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Law scaling continuation. The new innovations significantly raise the bar on performance and scalability, while providing an improved architecture designed to leverage mainstream or leading-edge compute resources more efficiently. This latest release builds on StarRC's decade-plus industry leadership and continues the consistent delivery of productivity improvements to help IC designers meet their design, resource and schedule challenges.

"As our customers continue to push the design envelope, they are increasingly challenged to manage the rapidly growing design and multi-corner parasitic big data using their available resources," said Robert Hoogenstryd, senior director of marketing for design analysis and signoff at Synopsys. "The 2015.12 release of StarRC not only delivers greater performance, but also provides smarter and more efficient utilization of existing resources, while keeping an eye on the big picture, that is, enabling more productive timing analysis and signoff."

StarRC is the industry's premier parasitic extraction solution, trusted through thousands of tapeouts across broad application domains including mobile, data processing, communications, Internet of Things (IoT), automotive and more, and over multiple generations of process technologies including the latest 10-nanometer (nm) FinFET node. It offers a rich set of capabilities to enable the highest signoff performance, such as widely deployed SMC technology that allows designers to extract multiple corners in a single run and achieve up to 3X faster runtime using the same resources and with the same signoff accuracy.

The 2015.12 release of StarRC extends the performance benefits through additional architectural improvements to yield another 2X speedup and a significant boost in multi-core processing scalability, enabling the use of more CPU cores more efficiently. Design teams have already leveraged the improved runtime and scalability, combined with SMC technology, to extract hundreds of millions of instances on more than 200 CPU cores. Others have significantly accelerated the runtimes for their full-chip designs, completing eight corners of extraction for 350 million design instances in less than 3.5 hours or 100 million design instances per hour.

In addition, the 2015.12 StarRC release delivers the productivity benefits to the full signoff cycle with a unique new link to Synopsys' PrimeTime® signoff solution. The 2015.12 release of PrimeTime can directly read StarRC's golden multi-corner binary database, eliminating the need for parasitic netlist writing for multiple corners and saving up to 4X disk space, as well as enabling up to 20 percent speedup in signoff TAT. Design teams are already beginning to deploy this new solution and take advantage of disk savings, such as reducing disk size from more than 380 GB to under 90 GB for a large FinFET design. The reduction in disk space usage, combined with StarRC's proven memory efficiency of 8 GB per core, allows designers the flexibility to use more economical hardware in their environment to achieve significant cost savings and efficiency.

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ZW3D 2016 Beta to Deliver More Intuitive & Interactive Product Design

25 January 2016

[ZW3D](#) today announced the availability of [ZW3D 2016 Beta](#), delivering much more collaborative product design to connect seamlessly your upstream & downstream partners.

"We've been devoted to developing innovative and better CAD products for over a decade," said Colin Lin, Director of ZW3D Overseas Business, "And this time, ZW3D 2016 Beta comes with numerous enhancements to be even easier and more intuitive to learn and use. "

One of the most significant features of ZW3D 2016 Beta is the newly-developed [PMI](#)(Product

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Manufacturing Information). Designers can define technique information, such as geometric dimensions, 3D annotations, surface finish and material specifications, directly on the 3D entities to guide the manufacturing process. This will help speed up interaction, streamline production and cut quotation time.

[3D sketch](#) is another milestone to verify ZW3D's progress in facilitating extremely easy-to-use and vivid modeling atmosphere. With common 2D sketch, everything is projected into the flat plane, leaving all constraints to be manipulated two- dimensionally. Now, users are free to snap or constrain sketches to any faces or 3D wireframe entities.

The new version takes its powerful & seamless data interoperability technology to an even higher level, supporting up-to-date file formats of mainstream solutions, like NX 10, Catia V4/V5/V6,Creo 3.0, Inventor V2016, Parasolid 28.1+ & ACIS 2016 etc., to smoothen the interaction with suppliers or partners, minimize costs of data exchange and reduce data errors.

In terms of CAM module, ZW3D 2016 Beta includes numerous improvements on the robustness and accuracy of 3X Quick Mill in roughing and finishing, like new path pattern guide, simplified cut boundary setting & new region order control etc.

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