PLM Industry Summary

Editor: CIMdata News Team
26 July 2024

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CIMdata News

Aerospace & Defense PLM Action Group Announces Release 3.0 of the PLM Global Collaboration Position Paper

23 July 2024

The Aerospace & Defense PLM Action Group (AD PAG) announces the publication of release 3 of the PLM Global Collaboration position paper. The purpose of the PLM Global Collaboration position paper is to document the Aerospace and Defense PLM Action Group's (AD PAG's) collective vision for a common mechanism to support Original Equipment Manufacturer (OEM)/supply chain product development collaboration. The group's goal is to simplify PLM global collaboration.

The newly released Edition 3 (Release 3.0) of the PLM Global Collaboration position paper builds on previous editions and lists the requirements for establishing the proposed To-Be collaboration environment. Edition 1 (Release 1.0) detailed the existing As-Is mechanisms for collaboration and the resulting negative business impacts. That information was incorporated into Edition 2/2.1 (Release 2.0/2.1), which was expanded to describe the mutually agreed upon future To-Be (i.e., Desired State) mechanism for collaboration.

In addition to publishing this position paper, the AD PAG provided a methodology—Collaboration Management System (CMS) Description—that addresses how OEM and supplier collaborations can be managed. It includes guidelines for a data integration/exchange setup, process, and practice protocols consistent with industry standards that all participants in product development collaboration should follow based on the proposed To-Be collaboration environment.

To learn more about the AD PAG's stance on Original Equipment Manufacturer (OEM)/supply chain product development collaboration, you may download this **Position Paper** at https://www.cimdata.com/en/aerospace-and-defense/publications/global-collaboration

About the Aerospace & Defense PLM Action Group

Since its founding in 2014, the AD PAG, administered by CIMdata, has sponsored research and jointly staffed projects on a diverse set of prioritized PLM-related industry and technology topics. These topics include Model-Based Definition, Multiple-View Bill of Materials, PLM Technology Obsolescence Management, Global Collaboration, Model-Based Systems Engineering, and Digital Twin/Digital Thread. As an outcome of these investments, the AD PAG has released a series of direction statements, research reports, position papers, and most recently, AD PAG Insights. All are freely available for downloading from its website at http://www.ad-pag.com/. Making these materials available is consistent with the Group's mission to engage proactively within the PLM ecosystem and advocate for common direction and positions within the aerospace and defense industry on PLM-related topics of importance to the members.

CIMdata's President & CEO authors article on Digital Twins in engineering.com

22 July 2024

CIMdata's President & CEO, Peter Bilello, has authored a new article in engineering.com on why organizations need their own digital twin. In this most recent article, Peter says, "As a long-time definer and observer of PLM, I do not doubt the viability of digital twins that are sufficiently robust to accommodate the entire enterprise. This is what I mean by Right-to-Market—ensuring the enterprise is optimally configured to enable and sustain long-term success in its marketplace(s). This ultimately means that the enterprise consistently maximizes its return on investment. And so, the inevitable technology user's question: can PLM solution providers' tools support Right-to-Market? Yes, as evidenced by their nonstop development of new capabilities, simultaneous uptake of new technologies and ongoing accommodations to structural changes in marketplaces."

Read the full article here: https://www.engineering.com/why-every-enterprise-needs-its-own-digital-twins/

CIMdata Publishes Simulation and Analysis Market Report

23 July 2024

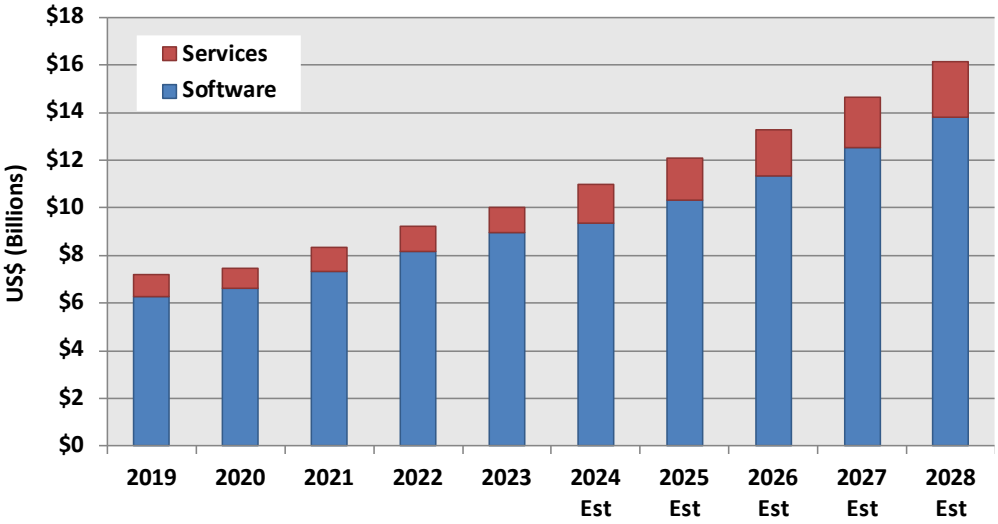
CIMdata, Inc., the leading global PLM strategic management consulting and research firm, announces the release of the CIMdata Simulation and Analysis (S&A) Market Analysis Report. This report expands on the S&A market analysis conducted as part of the CIMdata 2024 PLM Market Analysis Report Series. The well-known PLM MAR Series provides detailed information and an in-depth analysis of the worldwide PLM market during the calendar year 2023. It contains analyses of major trends and issues, revenues of leading PLM providers, and revenue analyses for geographical regions, industry sectors, and historical and projected data on market growth. The 2024 S&A MAR is a 95-page report containing over 50 tables and charts of data detailing the worldwide S&A market along several dimensions. It also includes an update on CIMdata's S&A segmentation, a discussion of trends in the S&A industry, and updates on the top S&A solution providers.

According to Don Tolle, the Co-Director of CIMdata's Practice for Simulation-Driven Systems Development, "Detailed 3D geometric modeling, simulation, and analysis for virtual prototyping and verification/validation (i.e., working along the right side of the systems engineering Vee) still accounts for the majority of the S&A market segment revenues. But to support the development and lifecycle support for smart, connected products, systems-level behavior modeling, simulation, and analysis are increasingly recognized as must-have core competencies to enable digital transformation based on model-based systems engineering throughout the lifecycle and across engineering domains. Physics-based digital twins and real-time data analytics using IoT-enabled smart systems are being enhanced by new artificial intelligence/machine learning capabilities. These enhanced solutions offer unprecedented product performance knowledge about today's complex products. Both end users and design engineers can benefit from this augmented product performance knowledge. Users need to know how best to optimize their product use and effectiveness in service. And design engineers

can leverage this knowledge to create innovative new products to meet ever more demanding customer and regulatory requirements, including environmental sustainability.

"To meet these challenges, there is a strong industry focus on creating standards-based, collaborative product innovation platforms that enable cross-domain digital process threads that can be shared, continuously improved, and managed throughout the product development lifecycle. The major software and services solution providers spanning the mechanical and electronics domains are investing heavily in R&D to create new model-driven, integrated MBSE, PLM, and S&A capabilities, as well as adding new leading-edge technologies by acquiring or partnering with smaller, innovative S&A solution providers. The convergence of physics-based S&A capabilities across the mechanical and electronics domains is a topic highlighted again in this year's report as EDA companies invest in physics-based S&A capabilities and the traditional cPDm/MCAD/S&A companies invest in electronic systems design capabilities."

As shown in the following chart, in 2023, S&A revenues grew to just over US$10 billion, an increase of 8.7% over the US$9.2 billion in 2022.



S&A Market History and CIMdata Growth Estimates

According to Stan Przybylinski, CIMdata's Vice President, "S&A is increasingly required to support today's smart, connected products. It continues to be used more 'upfront' in the product development process, helping companies evaluate multiple design concepts and optimize performance before committing to the final hardware and software design. Model-based approaches are being adopted more broadly in a wide range of industries, helping them meet the challenges of developing, testing, and deploying smart, connected products. Mergers and acquisitions of S&A firms continued, often to expand the acquirer's solution set and will provide significant cross-selling opportunities. This should help drive increased S&A investment. We also see interest in the S&A space from new players, such as Keysight acquiring ESI Group in 2023. Other deals announced in 2024 continue this trend.

"CIMdata expects the PLM market overall to continue its strong growth but at different rates for the different segments. For 2024, CIMdata forecasts that the S&A sub-sector will grow 9.5%

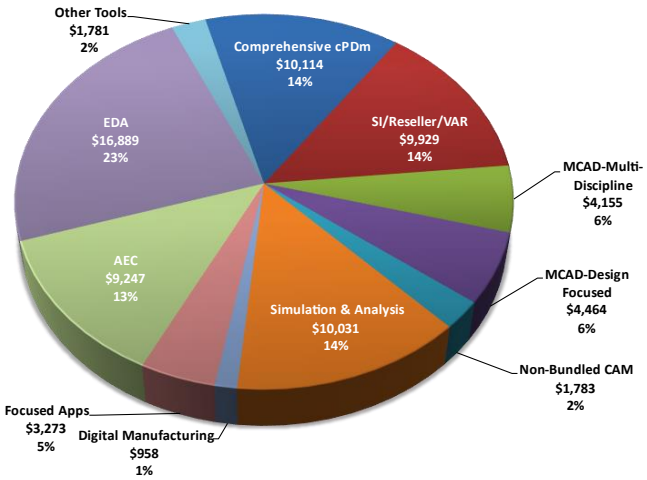
overall and have just under US$10.1 billion in revenues. CIMdata expects that S&A will be one of the fastest growing segments within the tools sector of PLM over the next five years, reaching nearly US$16.2 billion in 2028, with a 9.9% CAGR."

The 2024 CIMdata S&A Market Analysis Report is available for purchase at: http://www.cimdata.com/en/research/plm-market-analysis-report-series.

CIMdata Publishes Executive PLM Market Report

19 July 2024

CIMdata, Inc., the leading global PLM strategic management consulting and research firm, announces the release of the CIMdata 2024 Executive PLM Market Report. This report provides an executive-level view of CIMdata's comprehensive analysis of the PLM market, with summary charts on the overall market and on specific PLM solution segments (including the chart below). It also includes perspectives on current trends in the PLM industry and how they may affect current suppliers and investments.



Distribution of 2023 PLM Revenue by Market Sector

As measured in our PLM market analysis, the PLM Economy has continued to grow in 2023. In calendar year 2023, the PLM market grew to just over $72.6 billion (9% growth over 2022). "The PLM market saw strong results in 2023," according to Christine Longwell, CIMdata's Director of Research. "As customers develop increasingly complex products, technologies enabling the cooperative design of mechanical, electrical, and software systems are growing rapidly. Supporting this, the Electronic Design Automation (EDA) and Simulation and Analysis (S&A) sectors grew at 12.8% and 8.7%, respectively. As PLM technologies continue to move to the cloud, we still see a healthy market for systems integrators supporting implementation, migration, and integration, helping companies build a more robust and interconnected digital backbone. The services market for systems integrators and value-added resellers grew at 7.2%. Comprehensive cPDm grew at 8.9%, helped by some nontraditional industries such as retailers

and medical research adopting technologies that historically serviced complex products such as aerospace and automotive."

This report is the first of five modules of the CIMdata 2024 Market Analysis Report Series to be released. The MAR Series provides detailed information and in-depth analysis of the worldwide PLM market for the calendar year 2023. It contains analyses of major trends and issues, revenues of leading PLM providers, revenue analyses for geographical regions and industry sectors, and historical and projected data on market growth.

The CIMdata PLM Market Analysis Report Series is packaged into five modules:

The *CIMdata 2024 Executive PLM Market Report* provides an overview of CIMdata's complete global analysis. It includes key charts on PLM market investment statistics through 2023, forecasts of investments for 2024 through 2028, and a summary of PLM solution providers' performance in 2023.

The *CIMdata 2024 PLM Industry Review and Trends Report* is mainly qualitative and focuses on key issues facing the global PLM Ecosystem of solution providers and end-user organizations. It highlights changes that occurred in 2023, what impacts those changes may have in the short and medium terms, and what is on the horizon in the coming years.

The *CIMdata 2024 PLM Market and Solution Provider Analysis Report* details measures of and forecasts for the overall PLM market and its key segments in 2023, including Tools, cPDm, and Digital Manufacturing. The Tools section details sub-segments, including MCAD, NC, S&A, EDA, and AEC. It also includes CIMdata's estimates of PLM solution provider revenues in these segments and sub-segments for 2024 through 2028.

The *CIMdata 2024 PLM Market Geographic Analysis Report* provides an additional view of the 2023 market results by major geography. CIMdata's 2023 estimates and market forecasts for PLM and the major PLM market segments are provided for the Americas, EMEA, and Asia-Pacific. In addition, the report includes estimates and forecasts for the cPDm segment within specific European and Asia-Pacific countries and regions.

The *CIMdata 2024 PLM Market Industry Analysis Report* provides an industry segmentation view of the 2023 market results. CIMdata's estimates and market forecasts for PLM and cPDm are provided for ten industry sectors: aerospace and defense, automotive and other transportation, electronics/telecommunications, fabrication and assembly, process-packaged goods, process—petrochemical, utilities, construction, infrastructure, and shipbuilding.

The CIMdata PLM Market Analysis Report Series is available as a five-module set, or each module can be purchased separately. Selected modules are also available as part of the CIMdata Community Memberships. Further details and pricing information about the report and Community Memberships are available at www.CIMdata.com.

Free Webinar on Leveraging AI & Machine Learning in the Digital Thread

18 July 2024

CIMdata, Inc., the leading global PLM strategic management consulting and research firm, announces an upcoming free educational webinar, "AI & Machine Learning in the Digital Thread." The webinar will take place on Thursday, 8 August 2024, at 11:00 a.m. (EDT) and will last for one hour.

A digital thread is an integrated, connected framework of data that provides a comprehensive view of a product's lifecycle, from initial design through manufacturing, operation, and end-of-life. It connects data from various stages and systems, enabling seamless information flow and real-time visibility into all aspects of a product's life. A significant portion of an enterprise's intellectual property and possibly its unique value proposition lies hidden in its digital threads. As product complexity rises and product development cycles shrink, the insights gained from an enterprise's digital threads become critical to an organization's success.

AI and Machine Learning (ML) technologies are compelling in identifying patterns and developing predictive models from large amounts of data. When exposed to AI and ML techniques, product and process data from an enterprise's digital thread can transform the product lifecycle. Many potential use cases are becoming visible across industries. Benefits include;

- Improved collaboration, facilitating communication and data sharing across different departments and stakeholders, enhancing design outcomes.
- Enhanced traceability, aiding in compliance and quality control.
- Predictive maintenance to prevent potential failures and reduce downtime.
- Informed decision-making to enable better strategic decisions.

At CIMdata, we have been studying and researching the evolution of enterprise digital threads for several years. We are looking at it from the perspective of applying AI and ML technologies to generate additional enterprise value. This free webinar will share CIMdata's view on the current application of AI and ML technologies across enterprise digital threads and show how we see it evolving in the near term.

Attendees at this webinar will:

- Better understand AI's place within a PLM environment.
- Acquire practical insights on leveraging AI within a digital thread context and discover its transformative potential.
- Explore how AI can effectively manage and derive actionable insights from the overwhelming amount of data.
- Gain a comprehensive understanding of the applications and benefits of AI and ML.
- Be exposed to relevant analytics techniques and real-world use cases, providing a comprehensive understanding of AI's practical applications.
- Learn how to extract meaningful intelligence from PLM-related data, enhancing decision-making and strategic insights.

- Discover how to become an innovator equipped with AI capabilities.

According to Sandeepak Natu, the Co-Director of CIMdata's Simulation-Driven Systems Development Consulting Practice and the host for this webinar, "AI and ML have moved past the initial excitement phase in their application to support product lifecycle management. Many companies are experimenting with these technologies and are looking for impactful use cases. An enterprise's digital threads are crucial as they provide the data needed for AI/ML models. However, without a clear understanding of how these threads connect different parts of a business, AI/ML projects might not achieve their goals. At CIMdata, we guide our clients through this complex new territory."

With over 25 years of experience, Sandeepak Natu has a strong multi-physics-based modeling and simulation background, including hybrid digital twins. He began his career with Fluent India (now ANSYS Inc.) and has worked with various engineering consultancy and simulation software organizations. Sandeepak has extensive expertise in the automotive, aerospace, chemicals, pharmaceuticals, food, consumer products, and healthcare sectors. More recently, he has taken on technology and management consulting roles, focusing on digitalization, simulation, sustainability, and business management, including helping a global vaccine manufacturer scale up production during the COVID-19 pandemic.

People from multiple levels of an organization will find the information in this webinar pertinent and valuable. Executives responsible for PLM and digital thread initiatives, those responsible for digital transformation, PLM team leaders, PLM team members, PLM users, product managers, IT leadership, PLM solution providers, or anyone else who wants to understand AI trends and status within the global PLM industry will benefit from attending.

During the webinar, attendees will have the opportunity to ask questions about the topics discussed. To find out more, visit https://www.cimdata.com/en/education/educational-webinars/webinar-leveraging-ai-ml-in-the-digital-thread. To register for this webinar, please visit https://register.gotowebinar.com/register/7044062359304317017.

Acquisitions

Accenture to Enhance Retail Technology Transformation Capabilities with the Acquisition of Logic

16 July 2024

Accenture has entered into an agreement to acquire Logic, a retail technology services firm that works with retailers to drive customer loyalty, boost revenue and increase agility through the use of technology. With strong capabilities in merchandising, stores, digital, analytics and cloud, the acquisition of Logic will further enhance Accenture's ability to drive technology transformations for retail clients globally.

Company News

Altair Announces Winner of the 2023-2024 Altair Global Student Contest

26 July 2024

Altair, a global leader in computational intelligence, is thrilled to announce Luca Sutton, a member of the TUfast Eco Team, as the grand prize winner of the 2023-2024 Altair Global Student Contest. Sutton earned the contest's $7,500 grand prize by using Altair® Inspire™ to slash his team's Shell Eco-marathon vehicle suspension weight by 41%.

In his winning entry, Sutton used Inspire to develop accurate road loads to optimize five total parts. The optimization nearly halved the TUfast Eco Team's vehicle suspension weight and maintained a 1.3x factor of safety, ensuring its suspension will meet performance and durability targets when used in the field. Though Sutton won the competition for his individual entry, he will donate the grand prize earnings back to the TUfast Eco Team.

"This year's edition of the Altair Global Student Contest was outstanding – countless participants worldwide went above and beyond to demonstrate how they can use Altair's world-class solutions to enable next-generation innovation and sustainability," said Jim Ryan, vice president of academic programs, Altair. "Moreover, the contest helped every student build their portfolio and demonstrate to potential employers worldwide that they're real-world ready like never before. These students and their work prove that the future of engineering and sustainability is in good hands."

To celebrate the achievement, Sutton and the TUfast Eco Team were honored at a July 24 event at the Technical University of Munich (TUM) in Munich, Germany. The event also showcased how Altair technology contributed to the winning entry and how users of all kinds – including students and industry professionals alike – can benefit from the power, flexibility, and ease of use of Altair's portfolio. Special attention was paid to TUM's use of a special campuswide Altair license through the Altair Global Academic Program since 2022.

As a student-focused equivalent of the professional-grade Altair Enlighten Award, the Altair Global Student Contest challenges students, as individuals or teams, to lightweight anything while meeting or exceeding structural integrity, performance, and sustainability targets. In a global marketplace where sustainability and efficiency are key, the Altair Global Student Contest gives young engineers and designers the chance to showcase their optimization and lightweighting challenges on a global scale, compete for cash prizes, and build an outstanding portfolio in preparation to enter the workforce. 36 participants from 18 different countries took home prizes in this year's edition of Altair Global Student Contest.

The TUfast Eco Team is a TUM-based student team that competes in international motorsport competitions. The team designs and manufactures urban concept vehicles engineered for extreme electrical and aerodynamic efficiency to fulfill their vision of a mobility industry built on efficiency, sustainable electrification, and autonomous driving.

"I am honored to accept this award, and would like to thank Altair and the competition's judges for selecting myself and the TUfast Eco Team as this year's winners. Inspire is a remarkable, easy-to-use software that has all the professional features needed to model any real-world problems," said Luca Sutton, head of running gear and suspension team lead, TUfast Eco Team. "At TUfast Eco, we continue to introduce finite element analysis (FEA), topology optimization, and multibody simulation to new members of the team with Inspire, which offers a very clean and user-friendly interface that eases the learning process and dramatically reduces the steep learning curve of simulating physical problems."

Altair Signs MoU with the University of Nottingham to Develop Aerospace Digital Twin Project

24 July 2024

Altair, a global leader in computational intelligence, has signed a memorandum of understanding (MoU) with the U.K.-based University of Nottingham for a digital twin project within the aerospace sector. The digital twin—set to be the first of its kind—will not merely be a technology demonstrator, but a fully-fledged solution the industry can use to rapidly design, validate, and test the electric propulsion systems of new aircraft or advanced air mobility (AAM) vehicles and/or to evaluate the retrofit of existing ones.

The agreement will give University of Nottingham researchers unlimited access to the Altair® HyperWorks® design and simulation and Altair® RapidMiner® data analytics and artificial intelligence (AI) platforms. The platforms will empower researchers with technology for AI-powered multiphysics and multi-domain simulation, along with full data analytics and machine learning technology to manage experimental data and close the loop between the digital and physical models. In addition, the agreement also provides the university team with access to Altair's high-performance computing (HPC) tools and unlimited training.

"Altair is committed to boosting innovation with a focus on next-generation sustainability in all sectors. This is why we partner with some of the most advanced universities and research centers in the world, like the University of Nottingham," said Dr. Pietro Cervellera, senior vice president of aerospace and defense, Altair. "Through our leading technology and expertise, our ultimate aim is to develop groundbreaking new solutions that open new possibilities and advance sustainability in aerospace, transportation, and beyond."

"We share Altair's vision of accelerating the creation and delivery of innovations that can transform the technologies and systems we use every day," said Chris Gerada, Professor of Electrical Machines and lead for strategic research and innovation initiatives at the University of Nottingham. "Altair's technology will help us to accelerate the translation of zero carbon research into real-world industry solutions that decarbonise transportation. Paired with our leading strengths in electrification, hydrogen and manufacturing, this collaboration increases our capabilities and boosts Altair's status as a key industry partner of choice for the university."

This MoU is a key achievement that supports the capabilities of the university's new Zero Carbon Innovation Centre, co-funded by East Midlands Freeport, to build a complete digital twin of an electric propulsion system. Thanks to the vast possibilities Altair's technology offers,

the teams now have technology that spans energy storage (including batteries and fuel cells), power electronics and digital controllers, motors, cables, inverters, and the management of the systems' thermal, power, and electromagnetic interference (EMI).

For nearly 40 years has been a major player in providing software solutions for the aerospace industry. To learn more about Altair's aerospace solutions, visit https://altair.com/aerospace-and-defense.

ASICS and Dassault Systèmes Demonstrate On-Demand, Personalized Footwear

25 July 2024

Dassault Systèmes and ASICS have jointly opened a studio in Paris to test a new service providing on-demand sockliners personalized for individual foot shape.

The ASICS Personalization Studio is an ultra-compact factory. The modular structure combines Dassault Systèmes' 3DEXPERIENCE platform and virtual twin technology with ASICS' proprietary technology in sports to offer on-site, on-demand manufacturing of shoe parts to meet the exact specifications of any user.

ASICS will leverage its proprietary know-how, supported by Dassault Systèmes' modeling and simulation technology, to design the shape of sockliners based on individual foot shape data modeled and simulated on the 3DEXPERIENCE platform. Advanced 3D printing technology is then used to create the sockliner, a thick lattice structure made from a highly flexible material layered to provide excellent breathability and softness. The exact level of softness can be varied for any part of the foot, which aids physical recovery by reducing strain, while also improving performance.

ASICS plans to carry out operational tests and monitor user satisfaction as part of a trial run for a wider commercial release. In 2025, the ASICS Personalization Studio will be transferred to Japan for further testing and, in the future, the company will consider applying the technology to other footwear products besides sockliners.

"We are delighted to collaborate with Dassault Systèmes on the ASICS Personalization Studio. Our partnership leverages the advanced technology and expertise of two industry-leading companies to provide optimal value to each customer, helping them live healthier, happier lives with products that respond to their individual needs," said Mitsuyuki Tominaga, President and COO, Representative Director of ASICS.

"We share ASICS' commitment to innovations that improve health and well-being. Our partnership reflects this by demonstrating a holistic approach to manufacturing that prioritizes the consumer experience," said Pascal Daloz, CEO, Dassault Systèmes. "It also shows how the virtual world is catalyzing the 21st century economy. Through their foundation in science, our virtual twins enable industry to not only improve the performance and the experience of products but to advance more sustainable business models."

ASMPT and IBM Deepen Collaboration to Advance Bonding Methods for Chiplet Packages for AI

26 July 2024

ASMPT and IBM announced a renewed agreement to extend their collaboration on the joint development of the next advancement of chiplet packaging technologies. Through the agreement, the two companies will work together to advance thermocompression and hybrid bonding technology for chiplet packages, using ASMPT's next generation of Firebird TCB and Lithobolt hybrid bonding tools.

Chiplets deconstruct SOCs into their composite parts, creating smaller chips that can then be packaged together to operate as a single system, to provide potential benefits that can include improved energy efficiency, faster system development cycle time, and reduced costs. However, packaging advances are needed to move chiplets from research to mass production more quickly and efficiently, driven by the rapid pace of innovation in AI computing.

This latest agreement builds on an existing collaboration between ASMPT and IBM, resulting last year in the debut of a new hybrid bonding approach that optimizes bonding quality between two chiplets. Now, they will continue to work together on the development of bonding technologies for chiplet packages.

"IBM has been at the forefront of developing advanced packaging technology for the age of AI," said Huiming Bu, Vice President of IBM Semiconductors Global R&D and Albany Operations, IBM Research. "We are proud to continue our work with ASMPT to advance chiplet packaging technology to pave the way for smaller, more powerful, and more energy efficient chips."

"We are excited to build on our strong relationship with IBM to drive the frontiers of Advanced Packaging in tandem with accelerating innovations in artificial intelligence," said Lim Choon Khoon, Senior Vice President, ASMPT. "We are pleased to work with IBM to advance next generation packaging and Heterogeneous Integration solutions for the AI era."

Atos successfully delivered key IT services and applications for UEFA EURO 2024™, to connect football fans globally

23 July 2024

Atos, the Official Information Technology Partner of UEFA National Team Football, successfully supported UEFA to deliver key IT services and applications support for the UEFA EURO 2024 from June 14 to July 14, 2024 in Germany. Atos facilitated hundreds of millions of fans worldwide to share the electrifying experience of one of the most iconic football tournaments.

Atos supported UEFA in core IT solutions as event management system including accreditation, access control solution and competitions solutions, all requiring the highest level of reliability, efficiency and security.

Atos helped UEFA with some of the most innovative features launched at the UEFA EURO 2024™, like the Football Service Platform, providing data and statistics such as results, line-ups, live match events, players status and ranking to all UEFA stakeholders. They also contributed to

the mobile App and the website to enhance fan engagement, including UEFA's Gaming app initiative.

The Atos team consisted of IT Venue Managers, Venue Applications Coordinators and Service Desk Specialists present in the 10 tournament stadiums, and remote team members working from the International Broadcast Center and the IT Command Center of UEFA in Leipzig (Germany) or from other locations such as Nyon (Switzerland), Madrid, Barcelona and Tenerife (Spain), as well as Egypt, Poland, Romania and France. The entire Atos team played an instrumental role in providing on-site and remote support, ensuring the business continuity and the security of the services delivered to UEFA and fans, contributing decisively to making the EURO 2024 a seamless, global success.

Digital Engineering Awards launched by L&T Technology Services, ISG and CNBC TV18

25 July 2024

L&T Technology Services Limited, a leading global digital engineering and R&D company, today announced the launch of the third annual Digital Engineering Awards, in association with Information Services Group (ISG), a leading global technology research and advisory firm, and business news channel CNBC TV18 in India.

The Digital Engineering Awards recognize and celebrate global engineering excellence and innovation. Nominations are open to all product companies, manufacturers, and OEMs worldwide.

Enterprises and their service providers are invited to submit nominations **through September 23, 2024**. Winners will be announced during a gala awards celebration on **December 7, 2024, in Dallas, Texas, U.S.A.**

The latest edition of the Digital Engineering Awards aims to build on the success of the program to date, including that of the 2023 program, which attracted 200-plus nominations from more than 100 leading organizations from the around the world. Winners over the last two years include such blue-chip names as **AT&T, BMW Group, Caterpillar Inc., Chevron, Delta Airlines, ExxonMobil, GE Healthcare, Honeywell** and **Microsoft**, among others.

For the 2024 program, enterprise award winners will be selected by a global panel of industry experts—including representatives from ISG—in 11 categories, comprising six team awards and five individual awards.

This year's awards are divided into two segments—Engineering The Change and Engineer At Heart—and spread across the 11 categories. Reflecting the recent dynamic shifts in technology and AI adoption, two new awards have been created: **AI Champion (Innovator) of the Year** and **AI Impact of the Year.**

The Awards will be presented at the December 7 gala ceremony in the following categories:

Engineering the Change Team Awards

- Digital Transformation of the Year

- Top Sustainability Initiative
- Digital Engineering Project/Program of the Year
- Engineering Product of the Year
- Excellence in Value Realization
- AI Impact of the Year

Engineer at Heart Individual Awards

- The Distinguished Digital Engineering Leader
- The Digital Engineer of the Year
- The Woman Engineer of the Year
- The Innovator of the Year
- AI Innovator of the Year

Click here to submit your nominations

https://www.digitalengineeringawards.com/.

DXC Technology Recognized by Newsweek as one of America's Greatest Workplaces for 2024

24 July 2024

DXC Technology a leading Fortune 500 global technology services provider, has been recognized by Newsweek as one of America's Greatest Workplaces for 2024, reflecting the company's ongoing commitment to employees as a place to learn, thrive, grow and stay engaged.

This recognition by Newsweek highlights DXC's strong global workplace culture operating under the theme of "Grow Yourself." This includes a strong hybrid work environment; reskilling and training programs; an employee recognition program; and an online learning platform. DXC also has an extensive and active Employee Resource Group infrastructure with over 20 groups and regional chapters in the Americas, Asia Pacific and Europe, focused on areas such as diversity, mental health and student programs.

DXC has also developed innovative programs such as the award-winning DXC Dandelion Program, which fosters an environment that empowers and celebrates the talents and skills of neurodivergent individuals, providing them with meaningful employment in the IT sector.

"We pride ourselves on creating a people-first environment at DXC where our global colleagues feel valued and are able to bring the best versions of themselves to work," said Raul Fernandez, DXC President and Chief Executive Officer. "People who feel those connections on the job are more likely to contribute to the excellent work being done for our customers."

Newsweek and Plant-A Insights Group recognized the **America's Greatest Workplaces** in the United States, by conducting a large-scale employer study based on over 1.5 million comprehensive company reviews from over 250,000 employees."

HCLTech named HPE Hybrid Cloud Partner of the Year 2024

22 July 2024

HCLTech, a leading global technology company, has been recognized by Hewlett Packard Enterprise (HPE) as the HPE Hybrid Cloud Partner of the Year 2024.

The award underscores HCLTech's commitment to innovation, excellence and expertise in leveraging hybrid cloud solutions to empower organizations across various industries.

Through its strategic collaboration with HPE, HCLTech has consistently delivered transformative solutions that enhance flexibility, scalability and cost efficiency for its clients worldwide.

"HCLTech and HPE have been at the forefront of co-creating and driving innovative solutions for decades. Today, this award reaffirms our strategic partnership with HPE, built on the strong pillars of joint value creation, offerings, GTMs and customer-centric strategy, thereby positioning us as a trusted partner in customers' Digital and sustainable AI led Hybrid Cloud journeys," Rampal Singh, Senior Vice President and Global Business Head, Hybrid Cloud Business Unit, HCLTech.

"We are incredibly excited to announce HCLTech as the Hybrid Cloud Partner of the Year 2024 ! This recognition highlights HCLTech's continued drive for innovation backed with years of expertise in delivering top-notch hybrid cloud programs. This award reinforces our partnership with HCLTech, paving the way for leveraging cutting-edge joint solutions to further elevate our customers' digital transformation journey. Together, we are poised to lead the next wave of AI-driven hybrid cloud solutions," Tom Hempfield, Vice President, Ecosystem Sales, HPE.

HCLTech and HPE have also forged a strong relationship, emphasizing innovation and collaboration, to deliver advanced AI-led solutions that meet evolving business needs. Together, they assist enterprises in adopting GenAI at scale through HCLTech Cognitive Infrastructure Services. This joint solution establishes a robust Digital Foundation capable of supporting diverse industry-specific, domain-specific and business use cases, facilitating enterprise transformation for the hybrid/private AI era and beyond.

Keysight Named One of the World's Most Sustainable Companies in 2024 by TIME Magazine

24 July 2024

Keysight Technologies, Inc., has been recognized as one of the World's Most Sustainable Companies in 2024 by TIME Magazine. Keysight was ranked 247th out of the world's top 500 companies and 15th among the electronics, hardware and equipment industry, highlighting continued progress and industry-leading success in driving environmental, social, and governance (ESG) initiatives.

The recognition is the first of its kind for TIME Magazine and was conducted with Statista. Over 5,000 of the world's largest and most influential companies from over 30 countries were assessed. The process involved an extensive analysis with each company evaluated on more than 20 key data points, covering a range of best practices across transparency, reporting, commitment, and environmental and social stewardship.

Keysight remains committed to sustainability, and to measure success, the company tracks progress against a set of key impact goals that support environmental sustainability, positive social impact, and ethical governance with full details outlined in the Corporate Social Responsibility Report. This includes a continued commitment to reach net zero emissions in company operations by the end of fiscal year 2040 in addition to the company's approved near-term science-based targets, aligning with the Paris Agreement's preferred goal of limiting global warming to 1.5°C, and continued investment in community and education.

Ingrid Estrada, Chief People and Administrative Officer at Keysight, said: "We are extremely proud to be recognized by TIME Magazine. Sustainability is central to our vision at Keysight, and we are committed to building a better planet. Our solutions, services, and corporate social responsibility programs are at the heart of this, and we remain steadfast in our commitment."

The World's Most Sustainable Companies were identified by TIME Magazine in partnership with Statista. The full methodology and breakdown can be viewed here.

NTT DATA forges capital alliance with Alloyed to advance 3D metal-printing technologies and drive digital transformation and sustainability in manufacturing

25 July 2024

NTT DATA, a global digital business and IT services leader, and ALLOYED LIMITED, renowned for world-leading metallurgical research and expertise in designing and manufacturing advanced metal parts using alloy design technology and 3D printers, have formed a capital alliance, effective July 23, 2024.

Additionally, capital operations were conducted between NTT DATA XAM Technologies Corporation (hereinafter referred to as "NTT DATA XAM Technologies"), which offers advanced manufacturing technology using 3D printers, and Alloyed. Through this alliance, NTT DATA XAM Technologies will enhance its technological capabilities, offer solutions to customers' challenges in the design and manufacture of high-tech components, and support business expansion. To formalize the partnership, NTT DATA and Alloyed signed a share purchase agreement with NTT DATA XAM Technologies, and Alloyed simultaneously concluded a business alliance agreement directly with NTT DATA XAM Technologies.

Background and Purpose

NTT DATA's corporate philosophy is to "create new systems and value through information technology and realize a richer and more harmonious society." We contribute to the development of our customers' businesses and society by creating "systems" that fully utilize IT in collaboration with our customers and then we pursue continuously improvement after implementation. NTT DATA is actively investing in M&A both in Japan and overseas to

strengthen our consulting, digital technology and system development capabilities as well as expand our assets and further grow our business in Japan.

In May 2020, NTT DATA announced the establishment of NTT DATA XAM Technologies, which realizes new manufacturing techniques based on additive manufacturing (AM) technology. AM creates three-dimensional products by layering resin and metal powders. Since its establishment, the company has been actively developing various businesses initiatives. With the growing trend toward a sustainable society, NTT DATA will promote manufacturing digital transformation (DX), including "supply chain reform", by combining AM and digital technologies with the goal of expanding the AM market.

NTT DATA XAM Technologies provides customers with enhanced functionality, improved performance, and reduced development lead times by importing, selling, and maintaining 3D printers. NTT DATA XAM Technologies also develop and manufacture advanced metal parts. The printers are used by clients in the aerospace, industrial machinery, and motorsports industries.

Since 2020, NTT DATA XAM Technologies and Alloyed, have been building a cooperative relationship. The capital and business alliance will further strength the relationship.

Details of the business alliance

NTT DATA XAM Technologies and Alloyed have mutually licensed certain proprietary technologies to create the following synergies, including establishing exclusive use rights for some of the technologies.

Synergy Classification	Synergy Overview
(1) Material Development	• Expansion of material development and contract manufacturing projects utilizing Alloyed's technologies for special-purpose, high-functionality, and high-performance materials that can withstand ultra-high temperatures, such as those used in gas turbines, rockets, and engines.
(2) Productivity	• Optimization of AM design using Alloyed's AM design and manufacturing control software to reduce costs and streamline the manufacturing process. • Improvement of productivity through advanced in-process monitoring of defects during AM manufacturing and realizing automatic corrections.

- Enhancement of the manufacturability of challenging materials such as copper.

Comments from each company

Hiroshi Sugiyama, Head of Industry Business Sector of NTT DATA: "With the rapid advancement of AM technology through 3D printers in the global market and the expansion of related markets, we are excited to harness the combined strengths of Alloyed and NTT DATA XAM Technologies through this partnership. Looking ahead, NTT DATA aims not only to realize new manufacturing using AM technology with a forward-looking perspective, but also to integrate this with supply chain transformation and contribute to the industry's development."

Kenichi Mizunuma, President & CEO, NTT DATA XAM Technologies: "We are delighted to announce our capital alliance with Alloyed, leveraging their cutting-edge expertise in new material development originating from the University of Oxford. We eagerly anticipate deepening our business collaboration and contributing to the technological innovation of our manufacturing clients. By integrating Alloyed's outstanding knowledge in alloy development, extensive material data, thermal management design capabilities, and more, with our proficiency in quality certification and digitalization through advanced process monitoring, we have gained a significant competitive edge. This partnership underscores our commitment to advancing AM technology as a viable production method, positioning us to contribute to the revitalization of the domestic and global markets."

Michael Holmes, CEO of Alloyed: "I am delighted to announce this comprehensive partnership with NTT DATA XAM Technologies, which Alloyed has long considered one of the leading practitioners of AM technology in the world. Alloyed's technologies are about achieving more and more performance with less and less metal, and that theme is highly consistent with Japan's industrial imperatives. I'm convinced NTT DATA XAM Technologies is the right partner to bring this technology to the Japanese market."

Rolls-Royce and TCS Collaborate on Hydrogen Research Programme

23 July 2024

Tata Consultancy Services (TCS), a global leader in IT services, consulting, and business solutions, has expanded its partnership with Rolls-Royce, a British multinational specializing in civil aerospace, defence aerospace, services and power systems, to advance its sustainable initiatives. This collaboration involves research into hydrogen fuel system technology, continuing to prove hydrogen could be a zero-carbon aviation fuel of the future.

TCS, leveraging its expertise as a trusted service provider, will provide engineering skills and support to Rolls-Royce as it addresses three key challenges in the journey to enabling hydrogen for use in aviation: fuel combustion, fuel delivery, and fuel systems integration with an engine. All elements must be confirmed to operate safely.

This partnership underscores TCS's commitment to driving sustainable transformation across industries, aligning with its broader mission to harness technology for positive societal impact. The International Air Transport Association (IATA) has set ambitious targets for net zero carbon emissions by 2050, necessitating innovative sustainability solutions.

Alan Newby, Director, Research and Technology, Rolls-Royce, said, "We welcome TCS to our hydrogen research programme and their engineering skills will play a valuable role in addressing our technology goals. We've already made great progress and having TCS with us gives us additional capability as we move forward on our journey to enable the energy transition for the aviation sector."

This expanded partnership was announced at the Farnborough International Airshow where TCS also showcased its technological prowess in the aviation industry. The partnership builds on a long-standing relationship between Rolls-Royce and the Tata Group, including engines and a strong supply chain commitment. TCS has also been working with Rolls-Royce since 2010 in the areas of design, manufacturing engineering, control systems and software, after-market services as well as IT services. Having supported Rolls-Royce in major civil and business aviation programs, TCS has also supported its end-to-end product development lifecycle.

Anupam Singhal, President - Manufacturing, TCS, said, "The partnership between TCS and Rolls-Royce is an exciting one that represents a powerful alliance in the quest for sustainable aviation solutions. We are aligned with Rolls-Royce's ambition for a greener future. This partnership is the perfect opportunity to put our technological strengths and passion for the environment to use for advancing innovation and fostering an eco-friendlier aerospace sector."

TCS will leverage its deep domain knowledge of the aircraft manufacturing industry and will support the engineering activities of Rolls-Royce such as system design, component design, supply chain support and program management. These services will help Rolls-Royce research hydrogen technology as it addresses three key challenges in the journey to enabling hydrogen for use in aviation: fuel combustion, fuel delivery and fuel systems integration with an engine. All elements must be confirmed to operate safely.

Regu Ayyaswamy, Senior Vice President and Global Head- Internet of Things and Digital Engineering, TCS, said, "TCS and Rolls-Royce have been partners in advancing engineering excellence for nearly a decade. The new partnership for research into hydrogen fuel systems represents a pivotal next step at a time when the aviation industry is faced with the urgent challenge of reducing carbon emissions while maintaining performance and efficiency. It aligns well with TCS' commitment to harness technology for positive societal impact and building a greener future."

TCS has been on a mission to harness the power of technology for positive societal impact and drive sustainable transformation across industries. With more than 200 sustainability offerings, TCS is helping customers around the world in their sustainability journeys.

As a Tata group company, TCS is also conscious of its impact on the environment. In 2021, TCS had set an ambitious sustainability target to reduce its absolute emissions by 70% across Scope 1 and Scope 2 by 2025 over the baseline year 2016 and to achieve net zero by 2030. By FY24,

TCS had already reduced its absolute carbon footprint across Scope 1 and Scope 2 by 80% over a baseline of 2016, exceeding its target achievement by 10%, one year ahead of time.

Tata Technologies partners with Arm to drive innovation in software-defined vehicles (SDVs)

24 July 2024

Tata Technologies, a leading global engineering and product development digital services company, has announced a strategic partnership with Arm aimed at driving innovation in software-defined vehicles (SDVs). Combining Tata Technologies' rich automotive domain expertise and software capabilities with high-performance, power-efficient Arm® Automotive Enhanced (AE) technologies, this partnership strives to reduce the development time of SDVs for automotive OEMs.

The automotive industry is transforming towards SDVs, driven by the growing demand for connected, autonomous, and electric vehicles. The evolution of SDVs demands sophisticated software seamlessly integrating with hardware to enhance functionality, safety, and user experiences. As part of this strategic partnership, Tata Technologies will develop a SOAFEE reference architecture stack using the Arm AE portfolio and Arm Compute Subsystems (CSS) for Automotive, along with enabling a cloud-native development framework integrating a variety of DevSecOps and virtual platform solutions to shift-left the development of SDVs, accelerating the time to market for automakers.

This partnership builds on the momentum from CES 2024 and Mobile World Congress 2024, where Tata Technologies and Arm jointly demonstrated a cloud-native reference software architecture for SDVs on Arm SoCs. These solutions were presented at Embedded World 2024 on the newly launched Arm Cortex®-A720AE in a virtualised environment, realising a shift-left strategy for safety-critical vehicle software running on heterogeneous computing systems.

Speaking on the partnership, **Warren Harris, CEO & Managing Director of Tata Technologies**, said, "We are excited about this collaboration with Arm, which underscores Tata Technologies' commitment to engineering a better world by enabling the automotive industry to realise connected, autonomous and sustainable products that deliver great customer experience. As a strategic partner of Arm, we are developing innovative solutions leveraging their advanced Arm AE technology, and we expect this collaboration to deliver significant time-to-market benefits for the whole automotive industry. We are optimistic about the future of our partnership and the transformative impact it will have on shaping the future of mobility."

Dipti Vachani, senior vice president and general manager, Automotive Line of Business, Arm, commented on the collaboration: "Vehicle electronics are becoming increasingly complex with the need for more AI and software to improve user experiences and advance autonomy. This partnership combines the high-performance, power-efficient and functional safety leadership of the Arm AE technology platform and the time-to-market advantages of our CSS for Automotive with the automotive software expertise from Tata Technologies to empower our mutual customers to accelerate the development of AI-enabled vehicles."

The collaboration signals a promising future in developing and deploying cloud-native solutions for future next-gen vehicles. With 25 years of expertise in product engineering and digital services, along with a proven track record in delivering engineering solutions to the automotive industry, Tata Technologies is well-positioned to meet the needs of SDVs. Moreover, it will enable rapid prototyping, testing, and deployment of SDV technologies, unlocking new opportunities for developers and accelerating the time to market for leading OEMs.

Vertex Software Achieves AWS Manufacturing and Industrial Competency

22 July 2024

Vertex Software (Vertex) announced today that it has achieved the Amazon Web Services (AWS) Manufacturing and Industrial Competency. This designation recognizes Vertex for its expertise in providing customers software solutions for an end-to-end Industrial Manufacturing Software toolchain.

As manufacturing customers move to the cloud, they are looking for cloud experts with manufacturing experience to help them transform and use data in new ways, knowing they need to move faster than ever. AWS Manufacturing and Industrial Competency Partners provide customers with solutions across their digital transformation journey while being assured that they have support from a validated AWS Partner to meet their needs. These solutions follow AWS best practices for building secure, high-performing, resilient, and efficient cloud infrastructure for industry applications.

Vertex's cloud-based 3D visualization software delivers exponential value from existing computer-aided design (CAD) and product lifecycle management (PLM) investments by breaking down barriers to effectively share and collaborate with 3D data across all value chain stakeholders. Personalized 3D experiences are available to anyone, no matter what device they choose, and because Vertex streams context-aware pixels instead of part files, there is no risk of IP exposure.

Achieving the AWS Manufacturing and Industrial Competency differentiates Vertex as an AWS Partner Network (APN) member with demonstrated technical proficiency and proven customer success in running cloud solutions on AWS for the manufacturing and industrial sector. This program showcases manufacturing consulting and software partners who have domain knowledge and are providing cloud services. To receive the AWS Manufacturing and Industrial Competency designation, AWS Partners must undergo rigorous technical validation and provide vetted customer references.

"Vertex is proud to achieve the AWS Manufacturing and Industrial Competency," said Dan Murray, Founder and CEO of Vertex. "Our team is dedicated to helping our manufacturing customers achieve their business transformation goals by leveraging their 3D data beyond engineering. Vertex runs on AWS, providing our customers the deployment flexibility and security required to power their innovation journeys."

AWS is enabling scalable, flexible, and cost-effective solutions from startups to global enterprises. To support the seamless integration and deployment of these solutions, AWS

established the AWS Competency Program to help customers identify AWS Partners with deep industry experience and expertise.

Vertex's cloud-based 3D visualization enables uninterrupted collaboration across engineering, operations, sales, marketing, service, and support. Render 100% of the 3D data in the cloud, and zero-install means your end-users are just a click away from an interactive 3D experience. That's why our customers call us the Netflix for CAD.

Event News

Save the Date: ACE 2025 in Boston, March 31 – April 3

22 July 2024

Aras, a leader in product lifecycle management (PLM) and digital thread solutions, today announced today the date for its annual event, ACE 2025, taking place March 31-April 3, 2025, in Boston at the Hilton Boston Park Plaza.

Celebrating Aras' 25th anniversary, ACE 2025 marks a milestone year by inviting its community to Boston, where it all began. This special occasion promises to be an unforgettable gathering of industry leaders, innovators, and enthusiasts showcasing how leading organizations are transforming engineering and PLM with Aras.

ACE 2025 spans a total of four days, including both pre- and post-event days that offer training opportunities and technical discussions. The main event takes place on the second and third days with a keynote and sessions focused on the latest in PLM and digital thread innovation. Attendees will gain insight from top leaders and industry experts on technology and industry trends reshaping the business of transformation.

"ACE 2025 offers a unique opportunity for our community to come together and discuss how we leverage digital technologies to design, build, and manage products," said Roque Martin, CEO, Aras. "As we celebrate our 25th anniversary, hosting ACE in Boston is a special moment for us. The Aras community is a source for inspiration and education for innovative strategies that apply PLM and digital thread solutions to support sustainable growth in an increasingly dynamic world."

Simulations Plus to Participate in KeyBanc's 25th Annual Technology Leadership Forum

25 July 2024

Simulations Plus, Inc., a leading provider of biosimulation, simulation-enabled performance and intelligence solutions, and medical communications for the biopharma industry, today announced that Shawn O'Connor, chief executive officer, will attend KeyBanc Capital Markets' 25 th Annual Technology Leadership Forum on Monday, August 5, 2024, in Vail, Colorado. In addition to hosting one-on-one meetings throughout the day, Mr. O'Connor will join a panel discussion entitled "AI and Digital Solutions for Drug Discovery" followed by a 25-minute Fireside Chat at 1:30 p.m. MDT (3:30 p.m. EDT).

The live audio webcast of Mr. O'Connor's Fireside Chat can be accessed on the Investors page of the Simulations Plus website, where the replay will be available for 90 days following the event.

Financial News

Altair Announces Date of Second Quarter 2024 Financial Results Conference Call

22 July 2024

Altair, a global leader in computational intelligence, will release its financial results for the second quarter ended June 30, 2024, after the market close on Thursday, August 1, 2024. On that day, management will hold a conference call and webcast at 5 p.m. ET to review and discuss the Company's second quarter 2024 results and third quarter and full year 2024 outlook. A recorded version of this webcast will be available after the call and accessible at http://investor.altair.com.

Cadence Reports Second Quarter 2024 Financial Results

23 July 2024

Cadence Design Systems, Inc. has announced results for the second quarter of 2024.

Second Quarter 2024 Financial Results

- Revenue of $1.061 billion, compared to revenue of $977 million in Q2 2023
- GAAP operating margin of 28%, compared to 31% in Q2 2023
- Non-GAAP operating margin of 40%, compared to 42% in Q2 2023
- GAAP diluted net income per share of $0.84, compared to $0.81 in Q2 2023
- Non-GAAP diluted net income per share of $1.28, compared to $1.22 in Q2 2023
- Quarter-end backlog was $6.0 billion and current remaining performance obligations ("cRPO"), contract revenue expected to be recognized as revenue in the next 12 months, was $3.1 billion.

"Cadence delivered strong results for the second quarter of 2024, with robust demand for our cutting-edge technologies from AI, hyperscale, and automotive customers," said Anirudh Devgan, president and chief executive officer. "I'm pleased with the strong momentum of our Cadence.AI portfolio and our next generation Z3 / X3 hardware systems, and am excited about the growing demand for our industry leading products from an expanding foundry ecosystem."

"I am pleased with our strong Q2 results. We exceeded our outlook on all key financial metrics, closing Q2 with backlog of approximately $6 billion," said John Wall, senior vice

president and chief financial officer. "A good finish to the first half of the year, combined with ongoing demand for our solutions, sets us up for strong growth in the second half of 2024."

CFO Commentary

Commentary on the second quarter of 2024 financial results by John Wall, senior vice president and chief financial officer, is available at www.cadence.com/cadence/investor_relations.

Business Outlook

For fiscal year 2024, the company expects:

- Revenue in the range of $4.60 billion to $4.66 billion
- GAAP operating margin in the range of 29.7% to 31.3%
- Non-GAAP operating margin in the range of 41.7% to 43.3%
- GAAP diluted net income per share in the range of $3.82 to $4.02
- Non-GAAP diluted net income per share in the range of $5.77 to $5.97

For the third quarter of 2024, the company expects:

- Revenue in the range of $1.165 billion to $1.195 billion
- GAAP operating margin in the range of 27.7% to 29.3%
- Non-GAAP operating margin in the range of 40.7% to 42.3%
- GAAP diluted net income per share in the range of $0.83 to $0.93
- Non-GAAP diluted net income per share in the range of $1.39 to $1.49

The company utilizes a long-term projected non-GAAP tax rate, which reflects currently available information, as well as other factors and assumptions. The non-GAAP tax rate is subject to change for a variety of reasons, including the rapidly evolving global tax environment, significant changes in the company's geographic earnings mix, or other changes to the company's strategy or business operations. The company expects to use the current normalized non-GAAP tax rate through fiscal 2025 but will re-evaluate this rate periodically for significant items that may materially affect its projections.

Reconciliations of the financial results and business outlook from GAAP operating margin, GAAP net income and GAAP diluted net income per share to non-GAAP operating margin, non-GAAP net income and non-GAAP diluted net income per share, respectively, are included in this press release.

Business Highlights

- Cadence.AI portfolio continues to gain momentum, offering unparalleled chip-to-systems design capabilities that empower our customers to achieve exceptional quality of results and productivity benefits

- IP business continued its strong momentum with AI, 3D-IC and HPC applications fueling demand for our IP titles at the most advanced nodes
- Major long-term development partner broadly deployed Palladium Z3 to deliver to its next generation AI product roadmap, further solidifying Cadence's leadership in verification
- Closed BETA CAE acquisition and we now offer a comprehensive multiphysics platform covering electromagnetics, electrothermal, CFD and structural analysis solutions

Dassault Systèmes: Second Quarter 2024 Results in Line With Preliminary Announcement Non-IFRS Diluted EPS up 10% in the First Half

25 July 2024

Dassault Systèmes, on the back of the July 9, 2024 preliminary announcement, today reports its IFRS unaudited estimated financial results for the second quarter and first half ended June 30, 2024. The Group's Board of Directors approved these estimated results on July 24, 2024.

Summary Highlights[1]
(unaudited, non-IFRS unless otherwise noted, all growth rates in constant currencies)

- 2Q24 results in line with preliminary announcement: total revenue growth of 4% to €1.496 billion and diluted EPS of €0.30;
- For the first six months, total revenue increased 5% with subscription revenue up 9% and licenses & other software revenue up 2%. Operating margin was 30.5%, and diluted EPS[2] up 10% to €0.60;
- **3D**EXPERIENCE software revenue grew by 23% y/y in the first half despite the observed volatility in customer decisions in June, as highlighted during the preliminary announcement;
- Improved IFRS operating cash flow for the first six months at €1.13 billion, up 10% y/y at current exchange rate;
- In line with the preliminary announcement, the full year outlook is updated as follows: total and software revenue growth of 6% to 8% and diluted EPS growth between 8% and 11%.

[1]IFRS figures for 2Q24: total revenue at €1.50 billion, operating margin of 18.4% and diluted EPS at €0.21; IFRS figures for YTD24: total revenue at €3.00 billion, operating margin of 20.0% and diluted EPS at €0.42.
[2]Diluted EPS was up 7% at current exchange rate.

Hexagon Interim Report 1 January - 30 June 2024

26 July 2024

Second quarter 2024

- 0 per cent organic revenue growth (using fixed exchange rates and a comparable group structure)
- Net sales decreased by -1 per cent to 1,353.4 MEUR (1,366.0)
- Net sales including the reduction of acquired deferred revenue amounted to 1,353.4 MEUR (1,365.0)
- Adjusted gross margin of 67.3 per cent (65.6)
- Adjusted operating earnings (EBIT1) increased by 1 per cent to 399.5 MEUR (394.1)
- Adjusted operating margin amounted to 29.5 per cent (28.9)
- Earnings per share, excluding adjustments, amounted to 10.8 Euro cent (10.8)
- Earnings per share, including adjustments, amounted to 9.6 Euro cent (9.4)
- Operating cash flow before non-recurring items increased to 248.5 MEUR (212.5)
- Cash conversion amounted to 85 per cent (84)
- Recurring revenue increased by 8 per cent to 560.7 MEUR (520.3)

L&T Technology Services reports 7% growth in Q1FY25

22 July 2024

L&T Technology Services Limited, India's leading pure-play engineering services company, announced its results for the first quarter ended June 30, 2024.

Highlights for Q1FY25 include:

- Revenue at ₹24,619 million; growth of 7% YoY
- USD Revenue at $295 million; growth of 6% YoY in constant currency
- EBIT margin at 15.6%
- Net profit at ₹3,136 million; growth of 0.8% YoY

During the quarter, LTTS won two USD 30 million deals, two USD 15 million deals and three deals with TCV of USD 10 million.

"*We are making good progress with our 'Go Deeper to Scale' strategy and the simplification of our organization structure into three main segments. Mobility grew by 6% sequentially driven by our differentiated presence across EV, SDV and connected car technology that helped us win one $ 30 Million deal and two $15 Million deals during the quarter. In Hi-Tech and Sustainability, our new strategy is driving a significant increase in the pipeline and large deal discussions that makes us confident of a pickup in growth momentum.*

In AI, we are accelerating our investments and innovation focus leading to a total of 61 patents being filed so far. We are starting to win AI led deals on the back of our solutions in in Gen AI across Asset Health, software development and digital assistants.

With phase one of our reorganization and related investments in technology and leadership complete, we are reassured of our performance for the rest of the year and reaffirm our aspirations to reach $1.5 Billion in annualized revenues," said **Amit Chadha, CEO & Managing Director, L&T Technology Services Limited.**

Highlights and Recognitions:

- LTTS has been officially recognized as a Great Place to Work™ in the United States for the first time ever, and as a Great Place to Work in Poland for the second time in a row.
- LTTS was recognized as the Most Innovative Company of the Year 2024 – 25, by news channel ET Now.
- Won the FICCI Smart Urban Innovation Awards in the 'City Safety, Emergency Response, and Disaster Management' category for the Patna Smart City Project.
- LTTS has been rated as leaders in the Connected Product Engineering Services PEAK Matrix® Assessment 2024 in Embedded Engineering by Everest Group.

Patents

At the end of Q1FY25, the patents portfolio of L&T Technology Services stood at 1,343, out of which 853 are co-authored with its customers and the rest are filed by LTTS.

Human Resources

At the end of Q1FY25, LTTS' employee strength stood at 23,577.

Synopsys Announces Earnings Release Date For Third Quarter Fiscal Year 2024

23 July 2024

Synopsys, Inc. has announced it will report results for the third quarter fiscal year 2024 on Wednesday, August 21, 2024, after the market close. The company will host a conference call at 2:00 p.m. Pacific Time / 5:00 p.m. Eastern Time to review its financial results and business outlook.

Financial and other statistical information to be discussed on this conference call will be available on the corporate website at www.investor.synopsys.com immediately before the call. A live webcast will also be available on this site. Participants should access the live webcast at least 10 minutes prior to the start of the call. A webcast replay will be available beginning August 21, 2024, at approximately 5:00 p.m. PT. The replay will be available until Synopsys announces its fourth quarter and fiscal year 2024 results in December 2024.

Implementation Investments

Carrefour Selects Centric PLM to Strengthen Private Label Purchasing Strategy

22 July 2024

Centric Software®, the Product Lifecycle Management (PLM) market leader, proudly announces its partnership with Carrefour, one of the world's leading food retailers. Centric Software provides the most innovative enterprise solutions to plan, formulate, develop, procure, manufacture and sell consumer goods products in food & beverage, grocery, multi-category retail to achieve strategic and operational digital transformation goals.

As part of its mission to make their products both affordable and accessible to everyone, and to support their 2026 strategic objectives, Carrefour is focusing its efforts on building a cutting-edge digital retail company. The project will be targeting G6 countries in Europe: France, Spain, Italy, Benelux, Romania and Poland.

To create this new digital retail company, strengthen its purchasing strategy and streamline processes, Carrefour underwent an in-depth search for a PLM solution.

After examining numerous solutions, Carrefour selected Centric PLM™ as the foundation to support its ambitious 2026 strategic goals. Centric's proven broad functional coverage for food and HPC (Home and Personal Care) products, and Centric PLM's user-friendly experience, modular and flexible solution and robust technical foundation were features that led to Carrefour's decision.

"We are thrilled that Carrefour has selected Centric Software as a partner to support their 2026 strategic goals," says Fabrice Canonge, President of Centric Software. "With Centric PLM as the foundation of their digital transformation, we look forward to seeing Carrefour continue to make quality services, products and foods across accessible to all, across all channels."

Eisai Selects Medidata's Clinical Data Studio to Enhance and Modernize Clinical Trial Efficiency and Patient Experience

26 July 2024

Medidata, a Dassault Systèmes brand and leading provider of clinical trial solutions to the life sciences industry, announced Eisai Inc. ("Eisai"), the U.S. pharmaceutical subsidiary of Tokyo-based Eisai Co., Ltd., as one of the first customers to harness its recently announced AI-driven Medidata Clinical Data Studio. Eisai Inc., will leverage this innovative data experience to gain unprecedented control over its clinical data, enable the execution of scalable and complex clinical trials, and enhance patient experience.

"We've included Medidata's Clinical Data Studio in our clinical trial management platform given its ability to break down data silos and seamlessly integrate into our current software stack, while maintaining quality and integrity across all data sources," said Shobha Dhadda, Ph.D. chief clinical science & operations officer, at Eisai. "Having a suite of technology solutions capable of processing diverse clinical and patient data types provides increased efficiencies without sacrificing quality or needing additional resources."

Clinical Data Studio is powered by the Medidata Platform, the industry's only unified platform that centrally manages all data sources, improving data reliability across the entire clinical trial ecosystem. By seamlessly integrating data from both Medidata sources, including Medidata Rave EDC, and non-Medidata sources, such as labs or another electronic data capture system, Clinical Data Studio streamlines the import process and enables automatic validation through configured data transfer agreements. Utilizing AI, it mitigates challenges posed by disparate data systems and offers up to 80 percent faster data review while providing a comprehensive view of patient data that can be concurrently reviewed, visualized, and acted on.

"Through Clinical Data Studio, Eisai is enabling healthcare stakeholders to overcome the complexities of modern clinical trials and foster collaboration on cleaner, more actionable data," said Janet Butler, executive vice president, global head of sales, Medidata. "By delivering a unified AI-driven data management and analytics experience, we are enabling study teams to identify potential data issues faster and gain a more accurate understanding of the patient."

Salam Taps Oracle to Optimize Business Operations and Innovate with New Service Offerings

25 July 2024

Salam, a leading Saudi telecom provider, has awarded Oracle a managed services agreement to support its ongoing digital transformation. The collaboration will help Salam expedite operational excellence and enhance the experience it provides customers. These efforts will also further Salam's contributions to the Kingdom's Vision 2030 mission, which includes making Saudi Arabia a more connected and digitized nation.

Oracle Communications Consulting will provide critical support and guidance for managed IT operations, performance management, and service quality improvement. Using an Information and Communication Technology (ICT)-focused approach, Oracle will help Salam increase operational efficiencies, proactively identify and address potential issues, and enable seamless service delivery to its end customers.

"Oracle's technologies and managed services are accelerating our time to market for 5G," said Ahmed Al-Anqari, CEO of Salam. "As a Saudi-born company, Salam is at a digital transformation milestone in its journey. Our focus is on contributing to the advancement of KSA's ICT sector by enhancing our managed services among many other strategic initiatives. This will enable us to better serve the unique demands of our broad and growing customer base and be future-proof starting today."

A stacked advantage

Salam recently implemented components of Oracle Cloud Scale Monetization and Oracle Unified Operations, plus Oracle Sales CRM, to replace its legacy systems with a modular pre-integrated stack. This integration helps avoid the costly and time-consuming process of complex integrations with a high level of customization. With Oracle, Salam can launch, orchestrate, and monetize new offerings as the market demands. Future phases will take advantage of other Oracle Communications solutions to fast-track new digital services, such as 5G-enabled streaming, AR/VR gaming, and IoT-connected devices.

"Our close collaboration with Salam will help to diversify the company's revenue streams and strengthen its reputation as an innovator in the Middle East," said Ajay Goyal, group vice president, Oracle Communications. "In the fast-changing telco landscape, a cohesive managed services approach to systems, processes, and integrations is critical to the delivery of profitable services and, ultimately, a superior customer experience. We are dedicated to supporting Salam's business transformation goals by providing exemplary operational service, and product and network expertise."

Siemens and BAE Systems sign five-year agreement to collaborate to accelerate digital innovation

23 July 2024

Siemens and BAE Systems have announced an agreement that will see the two businesses collaborate on innovation in engineering and manufacturing technologies embracing digital transformation, whilst leveraging digital capabilities throughout program lifecycles.

The five-year agreement is designed to explore and develop a strategic blueprint for engineering of the future and factory of the future capabilities across design and manufacturing disciplines within BAE Systems. This builds on and exploits the recent deployment of Siemens' NX™ software for product engineering and Teamcenter® software for Product Lifecycle Management (PLM), from the Siemens Xcelerator portfolio of industry software. Edge computing solutions and technology validation have also been successfully used across multiple catapult and technology centres.

Through the agreement, Siemens Digital Industries and BAE Systems commit to working together regionally and internationally in the fields of Sustainability, Industrial Digitalisation, and Supply Chain Modernisation, to develop a framework to accelerate the commercial application benefits to BAE Systems within technology exploitation and adaptation.

The framework for collaboration follows decades of successful partnership between the two companies. This has included the development and delivery of a range of Siemens' technology, knowledge sharing between engineers and joint showcases of solutions at industry forums.

Operator calls up digital information from the automated logistics store in the factory for live factory data (Image credit: BAE Systems/Mark Wright)

Siemens and BAE Systems will also continue previous initiatives to innovate and develop new approaches to digital manufacturing supporting the Factory of the Future initiative within BAE systems.

Brian Holliday, managing director at Siemens Digital Industries in the UK and Ireland, said: “This agreement builds on a well-established, successful collaboration between BAE Systems and Siemens, companies which share ambitions to promote manufacturing careers and innovation. Technology is transforming manufacturing at an accelerated pace and we are proud to work with BAE Systems at the leading edge of Industry 4.0 in the UK.

“The partnership is a good example of Siemens’ broader vision for how we want to work with customers via Siemens Xcelerator. which is built on digital portfolio, eco-system thinking and a digital marketplace. The principle is that by working together in a focussed way, we can accelerate the time to business and sustainability benefits through technology.”

Iain Minton, Technology Capability Delivery Director at BAE Systems, said: “Collaborations like this help us develop and invest in digital thread enabling technologies in a much more integrated and seamless way. Siemens understand the complexities of our operating environment, so we can very quickly mature an idea to the point where it is put into practice, for example when we are looking to implement / optimise new engineering, support or manufacturing capabilities. That’s the real value of this collaboration – the trust and understanding we have built together creates a really powerful force in driving results for the aerospace sector.”

Ben Sheath, vice president and managing director, UK & Ireland, Siemens Digital Industries Software, said. “We are pleased to extend Siemens’ two-decade long relationship with BAE Systems as it continues to deliver on strategic plans to build the factory of the future. We look forward to working alongside the team at BAE Systems as they leverage the power of Industry 4.0 to help achieve the company’s digital transformation goals. This is another great example of how leaders in aerospace are choosing to partner with Siemens and adopt the Siemens Xcelerator portfolio as the foundation of their digital transformation.”

Product News

Ansys 2024 R2 Delivers Multiphysics Innovation Across Industries and Engineering Domains

24 July 2024

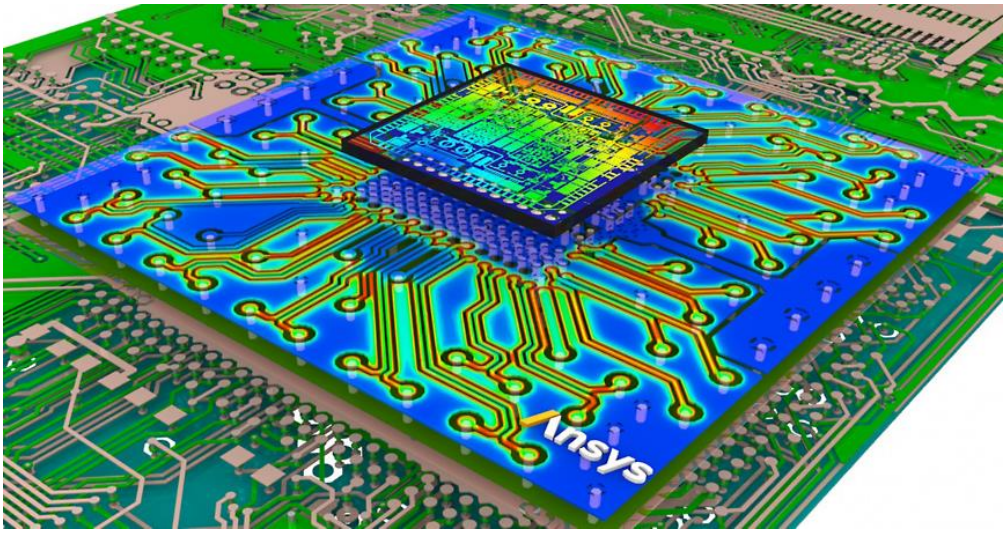
Ansys 2024 R2 redefines the boundaries of product design by enabling customers to move beyond the limits of single-physics simulation to gain multidimensional insight into the performance of today’s complex products. R2 enhancements focused on accelerating run times, scaling capacity, enabling digital transformation, and providing hardware flexibility are making Ansys multiphysics simulations more accessible and powerful than ever before.

"Ansys 2024 R2 makes our portfolio deeper, broader, smarter, and more connected than it's ever been,” said Shane Emswiler, senior vice president of products at Ansys. "Customers rely on Ansys software that spans the entire range of physics and domains, from systems simulation to digital twins. We look forward to the truly transformational innovations our customers will

engineer with Ansys' pervasive simulation insights and the expertise of the Ansys Customer Excellence support team."

Customers across industries will realize gains in productivity and collaboration through R2's enhancements to connected workflows across the Ansys portfolio.

"We are established users of Ansys enterprise tools and rely on the predictive accuracy, speed, and flexibility that its solutions like Ansys Discovery™ design tool provide," said Dr. Jon Powell, technical specialist simulations at Malvern Panalytical. "The same workflow can start in one engineering department and get passed to another without losing fidelity, all while saving huge amounts of time and effort."



Interposer on Package on PCB assembly captured for comprehensive IC to system level simulation and analysis

Complex problems require comprehensive solutions

Ansys 2024 R2 streamlines multiphysics workflows, simplifying the process of connecting multiple, disparate software technologies across domains. The new release makes it easier for users to comprehensively evaluate cost and performance throughout a product's life cycle, from the most complex chips to electric vehicle powertrains.

Advanced packaging techniques for next-generation IC designs promise significant performance gains but increase design complexity. The new Ansys HFSS-IC solver addresses the growing complexity of today's advanced chip designs. Integrating Ansys' leading electronic and semiconductor technologies, the new HFSS-IC solver excels at deep electromagnetic analysis for IC signoff across power and signal integrity analysis — ensuring the final iteration delivers the performance demanded by next-generation electronic devices.

Increasingly complex multiphysics design challenges are permeating nearly every industry, including automotive. As companies seek to mature electric vehicle (EV) technology, optimizing noise, vibration, and harshness (NVH) in EV motors is crucial to vehicle performance and safety. Enhancements to Ansys Mechanical™ structural simulation software for e-powertrain

workflows boost overall productivity of NVH analyses by delivering more accurate test correlation, acoustics simulation, and speed improvements.

This release also includes seamless data transfer between the Ansys Zemax® optical system design software and the Ansys Speos® optical performance analysis solver to more efficiently evaluate and optimize optical designs — including large systems with complex fields and wavelengths. For example, the integration unlocks streamlined straylight analysis for optical systems to help users eliminate unwanted effects caused by lens flare, light leakage, and scattering in optical systems.

From chips to missions to deployment: Ansys AI enhances solutions across domains

Ansys continues to deliver new use cases for AI, adding the Ansys TwinAI software to its portfolio. TwinAI software seamlessly combines insights from real-world data, powered by cutting-edge AI techniques, with the accuracy of multidomain models. This release also includes improvements to enable scaled deployments to the cloud or edge, allowing customers to unlock additional insights from real-world data.

“Innovation fuels progress, and at Tata Steel Nederland, we're pioneering a transformative journey towards sustainability," said Paul van Beurden, knowledge group leader – R&D, Tata Steel Nederland. "By harnessing the power of Ansys TwinAI software, we're optimizing our production processes, minimizing energy loss, and driving towards our decarbonization reduction targets of 30-40% by 2030 and being carbon neutral by 2045. Ansys technology is instrumental in getting us there.”

The Ansys Missions AI + tool is a new technology that delivers algorithms focused on enhancing Ansys Digital Mission Engineering (DME) products. Engineers can automatically evaluate the quality of resulting orbit solutions with tuned models to provide expert-level analysis and enhanced safety of flight routines. Infusing AI into Ansys DME solutions allows users of varying simulation expertise to access and deploy the technology with ease.

Ansys AI integrations are also creating design efficiencies for nanometer-scale semiconductor applications. Ansys RaptorX™ electromagnetic modeling software now includes an AI-driven IC floorplan optimization solution, which identifies the ideal layout for mitigating electromagnetic coupling issues in analog and RF IC designs. By combining the power of the RaptorX solver with AI, users can reduce circuit footprint and shrink design time from weeks to days.

Ansys hardware partners and open ecosystem deliver blistering simulation speed

Ansys technology in 2024 R2 facilitates highly scalable high-performance computing (HPC) deployment, with all solver technologies optimized to run on central processing units (CPUs) and a growing list of solutions optimized for the latest graphics processing unit (GPU) hardware from multiple vendors. This list includes the Ansys AVxcelerate Sensors™ software for autonomous system testing, which now features adaptive grid sampling for long range object detection. Adaptive grid sampling allows simulation users to narrow their focus on specific objects within a virtual driving scenario to gather more targeted data. When compared to global sampling, which gathers all data from a driving scenario resulting in oversampling, the

AVxcelerate Sensors enhancement delivers 3x faster simulation and 6.8x less GPU memory consumption with the same or better level of object detection and predictive accuracy.

Ansys Fluent® fluid simulation software boasts new hardware compatibility with AMD GPUs, supporting a broader selection of hardware options. Users working on acoustics, reacting flows, or subsonic/transonic compressible flows can now leverage the multi-GPU solver to run their simulations at exponentially faster speeds with the expansion of physics modeling capabilities. Embedded integration of Ansys optiSLang® process integration and design optimization software supports further exploration of design options through built-in parametric optimization.

Click here to learn more about Ansys 2024 R2.

HCLTech launches Enterprise AI Foundry on Microsoft Azure

26 July 2024

HCLTech, a leading global technology company, announced the launch of HCLTech Enterprise AI Foundry on Microsoft Azure, enabling enterprises to combine their data and AI assets with Microsoft's Azure Data & AI services to accelerate their GenAI-driven transformation journeys and time-to-value.

HCLTech Enterprise AI Foundry on Microsoft Azure enables streamlined operations and smart decision-making, accelerating time-to-value and driving positive business outcomes. Using Azure AI Studio, Azure OpenAI Service and Cognitive services, HCLTech's Enterprise AI Foundry expedites AI solution development and deployment. It also assists in establishing an AI-ready data foundation, ensuring high-quality AI-powered data solutions.

"In the rapidly evolving technology and business landscapes, there is an urgent need to help enterprises avoid AI tech debt, reduce the dilemma surrounding AI implementation choices and adopt AI with trust and reliability. We believe this initiative with Microsoft will mark a significant milestone in fostering a culture of AI adoption across enterprises," said Vijay Guntur, Chief Technology Officer and Head of Ecosystems, HCLTech.

"HCLTech's new Enterprise AI Foundry, powered by Microsoft Azure and Azure OpenAI service, offers an innovative approach for customers who want to drive business transformation. Leveraging the Enterprise AI Foundry, customers will add momentum to their AI initiatives for tangible business impact," said Marianne Roling, Vice President, Global System Integrators, Microsoft.

HCLTech is a distinguished Microsoft AI Specialization partner and brings vast experience in leveraging Microsoft Azure and GenAI for over 100 clients.

To learn more about HCLTech Enterprise AI Foundry, visit https://www.hcltech.com/digital-business/data-ai-foundry

OpenBOM Introduces Groundbreaking xBOM Feature Simplifying Complex BOM and Digital Thread Management

22 July 2024

OpenBOM, a leading provider of cloud-based PDM and PLM software, helps manufacturing companies manage their digital product information, organizing bills of materials and parts, inventories, and managing the digital thread of information across the value chain connecting OEMs, contractors, and suppliers, today announced the expansion of OpenBOM services to support xBOM and extended digital thread support.

OpenBOM introduces xBOM, enabling users to manage different types of Bills of Materials (BOM) for various lifecycle stages and departmental needs, including Engineering BOM (EBOM), Manufacturing BOM (MBOM), and Support BOM (SBOM). xBOM provides a comprehensive, adaptable view of product structures, enhancing collaboration and streamlining processes across the product lifecycle. This service democratizes advanced BOM management features, making them accessible to companies of all sizes, and ensures seamless transitions from engineering to manufacturing and support.

This innovation provides access to advanced BOM management features traditionally available only through enterprise PLM platforms. OpenBOM's xBOM service simplifies and enhances the user experience, making these capabilities available to companies of all sizes. By offering a robust and flexible infrastructure for managing data across multiple product lifecycle stages, OpenBOM allows seamless transitions from engineering to manufacturing and support, ensuring each department has the information it needs to perform its tasks efficiently.

"At the core of OpenBOM's xBOM service is a multi-view BOM architecture, enabling the creation of multiple BOM structures connected in the product knowledge graph database and polyglot persistence data architecture," says Oleg Shilovitsky, CEO and co-founder of OpenBOM. Shilovitsky continues, "This strategic approach enhances data accuracy and promotes better collaboration and communication between departments. The intuitive administration interface allows for easy setup and management of different BOM types, with the flexibility to define templates and independently manage BOM structures. This new service is a significant step in expanding OpenBOM's data modeling capabilities, ensuring customers have the tools they need to succeed in a competitive market."

Jonathan Drori, the lead engineer at Tomcar, a manufacturer of off-road and special vehicles and a long-time OpenBOM customer, shares his experience: "We used the opportunity [OpenBOM] to completely refactor our BOM structure in OpenBOM. We had a rather flat BOM structure up to that point. OpenBOM's flexibility allowed us to reimagine our TOMCAR BOMs in a much higher resolution, with more granularity of sub-levels and BOM components. The modular BOM approach unlocked the reuse we had planned in the original TOMCAR. The EV variant uses much of the same chassis and other components with a completely new powertrain. Preparing a powertrain BOM that can be dropped into the TOMCAR allowed us to produce a new product while maximizing reuse."

Tech Mahindra Launches VerifAI, a Comprehensive GenAI Validation Solution for Enterprises Globally

25 July 2024

Tech Mahindra, a leading global provider of technology consulting and digital solutions to enterprises across industries, announced the launch of **TechM VerifAI**, a comprehensive solution for validating and verifying the outcomes of Artificial Intelligence (AI) and GenAI projects. Through this solution, Tech Mahindra will help enterprises validate the end-to-end lifecycle of AI-based projects, thereby, enabling them to scale their AI initiatives speedily.

TechM VerifAI's pre-built, 360-degree validation framework across the GenAI lifecycle, customizable metrics, microservices-based architecture, and seamless integration into existing technology stacks will ensure faster and reliable AI value realization for enterprises. The solution will validate data quality in the discovery and pre-development stages and test AI models, frameworks, and hyper-parameters in the development stage to ensure security and accuracy. It will also verify and tune the deployed models to ensure outputs are consistent, explainable, and meet user expectations post deployment.

Kunal Purohit, President – Next Gen Services, Tech Mahindra, said, *"Many companies have not moved from pilots and experiments to enterprise level adoption of AI, due to absence of a robust validation and assurance framework. TechM VerifAI addresses this need with a comprehensive framework for assessing, auditing, and certifying AI solutions across various domains and use cases. By adopting TechM VerifAI, enterprises can responsibly leverage AI for growth, success, and scale at speed by automating their validation and verification processes to a large extent."*

Tech Mahindra will leverage its experience of leading validation and verification projects for GenAI product innovators and early adopters to scale their AI initiatives at speed. The company understands the comprehensive requirements of implementing a full-stack AI solution, encompassing key elements from infrastructure and datasets to rules, Application Programming Interfaces (APIs), GenAI models, and visualization layers. After the successful integration of TechM amplifAI offerings with over 100 assets and Intellectual Properties (IPs) that democratized and scaled AI deployment responsibly, this new solution aims to further enhance AI assurance and ensure the timely verification and validation of AI projects for enterprises globally.

Additionally, Tech Mahindra has been making significant strides in offering next-gen solutions to enterprises worldwide. The company recently announced the launch of Project Indus, a first of its kind foundational open source Large Language Model designed to converse in a multitude of Indic languages and dialects. The launch of TechM VerifAI further demonstrates the company's commitment to enabling enterprises to scale rapidly with technological advancements, building a future where AI solutions are accessible, scalable, and responsible.

TECHNIA Unveils myPLM 2.0: Enhancing CAx Workstation Management

24 July 2024

TECHNIA, the #1 knowledge leader in virtual twin solutions and digital engineering, today announced the release of myPLM 2.0. This latest version introduces significant improvements and innovative features designed to make the management and use of CAx environments more efficient and user-friendly.

myPLM accelerates the use of complex CAx environments such as CATIA V5, 3DEXPERIENCE, NX, and Creo, and enables the management of various customer-specific CAx versions, licenses, and additional products.

*"**myPLM 2.0** has taken a big step forward. The new user interface and the improved functions are very well received by users. The license traffic light and the notification system are particularly advantageous"* **Jan Heger**, **myPLM** Product Manager.

Product Highlights of myPLM 2.0:

1. New User Interface (UI) and Modern User Experience (UX):

- The updated UI features a fresh, modern design, making the software easier to navigate and use.
- 4K/8K Support: **myPLM 2.0** is fully compatible with high-resolution 4K and 8K displays, offering improved visual clarity and detail.
- Dark Theme: Users can now choose between light and dark themes to customize the software to their preferences and work environments.

2. New and Improved Features:

- Embedded Active Directory: Integration with Active Directory simplifies the management of user accounts and access rights within the CAD environment.
- License Traffic Management: Enhanced tools for displaying and managing software licenses.
- Real-time Notification System: Keeps users informed of important events and changes as they happen.
- Favorites Management: Quick access to frequently used CAD environments through the new Favorites feature.

3. New Technology Stack:

- Transitioned to a modern technology stack based on C# and Webview2, eliminating the need for Java.

4. Increased Performance:

- Numerous optimizations result in a faster and more responsive experience.

5. Cloud-Ready:

- Ready for cloud deployment, offering flexible and scalable application use.

Future Outlook:

At TECHNIA, we are committed to continuously developing **myPLM 2.0**, providing new features and CAx management solutions to optimize your engineering processes.

The IntelliCAD Technology Consortium Announces IntelliCAD® 13.0

26 July 2024

The IntelliCAD Technology Consortium (ITC) today announced the release of IntelliCAD 13.0.

IntelliCAD 13.0 is a major release that includes performance improvements and new features, including a new Options dialog which is highly compatible with other CAD applications, calculators for evaluating expressions and converting units of measurement, lookup tables and the ability to reset advanced blocks, and digital signatures for .dwfx files. When creating reports, extract data from external references, advanced blocks, attributes, and AEC entities; extract from .dgn, .ifc, .rvt, and .rfa files if supported; and filter data to meet conditions.

LISP is completely refactored to improve performance and increase compatibility with other CAD applications. Other new features include Flatshot, Solid Profile, Make Shape, Compile to SHX, and Make Linetype, and more.

For program versions that include Spatial® Technology ACIS® modeler, use the following commands to work with surfaces: Network, Offset, Fillet, Extend, and Trim.

For IntelliCAD versions that support working with BIM files: use the IFC Validate, RVT to IFC, and Corner Window commands; dimension AEC entities; manage layers for .ifc underlays; define styles for new elements such as roof slabs, dimensions, structural members, and more; and attach railings to stair segments.

For IntelliCAD versions that support editing and creation of .dgn files in their native format: use the BMP Out, Undelete, and Copy Nested Entities commands; use the Parallel entity snap; highlight entities; and use the Explorer command with views, external references, blocks, and layer filters.

For technical users, IntelliCAD 13.0 uses ODA SDKs version 2024.12. IntelliCAD IcARX continues to be a pre-release version for members and is highly compatible with AutoCAD® Object ARX, allowing ITC members to build applications with a single code base that runs on both platforms.

David Lorenzo, ITC President, stated “IntelliCAD 13.0 brings significant performance improvements and new features that our members have been eagerly anticipating. We are especially excited about its enhanced compatibility with other CAD applications in two key areas. The new Options dialog simplifies the user experience for those familiar with other CAD software, and the refactored LISP API provides a foundation for improved compatibility moving forward, greatly reducing LISP development time when working with multiple CAD platforms.”

IntelliCAD 13.0 is supported on Microsoft® Windows® 11, Windows 10, and Windows 8 64-bit versions. IntelliCAD Mobile Viewer versions are available for Windows desktop, Google® Android™, Apple® macOS® and iOS.