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CIMdata News

Accenture Develops MBSE Practice: Helping Clients Transform to Manage Growing Product Complexities – a CIMdata Commentary

5 October 2021

Key takeaways:

- The shift to smart, connected products in a wide range of industries revealed the need for systems design thinking to tackle ever-rising complexity while ensuring products meet performance and safety requirements.
- Engineering, manufacturing, and service methodologies and processes need to evolve to take advantage of model-based systems engineering (MBSE) practices.
- Integrated MBSE provides engineers and managers the ability to see the effects of field results in context of a living product—it facilitates digital twins.
- Organizational adoption of MBSE methodologies requires training, coaching, and systems engineering skills as part of a transformation project.
- Accenture’s MBSE Practice and coaching capabilities enable Integrated MBSE using the 3DEXPERIENCE Platform and its digital twins.

Model Based Systems Engineering improves Product Robustness

The pace of product evolution has never been as fast as it is now. Accelerated by digitizing products, product innovation continues with many companies applying systems thinking to help assure product and process reliability. Systems thinking improves a product’s life. CIMdata believes that holistic Systems Engineering (SE) must be integrated and used throughout a product’s life. A digital twin should evolve with the product it represents—especially after production. The context of a digital twin is improved when annotated with field experience, enhancing product understanding using more operational data.

CIMdata defines systems engineering as “a trans-disciplinary and integrative approach to enable the successful realization, use, improvement, and retirement of engineered systems, using systems principles and scientific, technological, and management methods.” In this definition, the terms “engineering” and “engineered” are used in their widest sense. working artfully to bring something about.” SE improves decision making which spans product lines and lifecycles. Leading companies encourage this “systems thinking” by training people with techniques like Design for Six Sigma (DFSS)—encouraging engineers to understand noise and control elements when inventing new products.

As new insights are learned, systems engineers continuously explore the product architecture and performance to better understand risks and make refinements and upgrades throughout the product’s life. In today’s world, products are commonly driven by IoT opportunities. That said, a large volume of information can be traced back to the products’ performance. Using this gathered information to improve product models makes the digital twin even more valuable. Digital twin models of product usage and manufacturing form the basis of systemic MBSE—using models to improve SE.

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CONNECTING THE DOTS

SYSTEM MODEL

Functional and behavioral modelling



CONTROL MODEL

Automation and control design, modelling and simulation, FMU co-simulation



3D MODEL

Digital mock-up with realistic and interactive rendering



PHYSICAL MODEL

Integration in physical architecture, MIL, HIL

Figure 1—Can MBSE Help Connect the Dots?
(Courtesy of Accenture)

Figure 1 illustrates the lifecycle breadth and integration requirements for key SE work products. In the past models were built by SE experts based on their knowledge of ideal systems interactions. Sometimes models were tuned with test data. Few efforts were made to have shared models, often the result of organizational design and a lack of systems thinking.

Competitive and complexity pressures require faster decisions made well. SE, DFSS, and design thinking are all skills which practicing engineers must embrace, regardless of their domain of expertise. Product requirements are best managed in a repository containing the authoritative truth that enables different views and analyses as product lines are conceived and enhanced. Accenture’s overall approach is technology agnostic to support the varied environments that exist at their many customers. As such, they need to have deep expertise in the solutions offered in the marketplace to address customer needs.

An example of a PLM ecosystem embracing and encouraging connected SE is provided by Dassault Systèmes CATIA and its modeling applications. While these tools are powerful, organizations need to consider new ways of working to take advantage of these capabilities. System Engineers must work throughout the product design, manufacture, and use phases of the product lifecycle to improve product robustness while handling new complexities. Dassault Systèmes is one of their many partners and is the focus of the examples in this commentary.

Organizations Need Help Applying MBSE Practices

CIMdata’s PLM definition emphasizes complete end-to-end product lifecycle: PLM is a strategic business approach that applies a consistent set of business solutions in support of the collaborative creation, management, dissemination, and use of product definition information across the extended enterprise and spanning from product concept to end of life—integrating people, processes, business systems, and information.

Modern PLM platforms offer services to find contextual data from different sources, while also taking advantage of computing evolution. CIMdata believes that PLM is needed to enable the best MBSE practices.

Companies need help understanding, promoting, and developing MBSE within their organizations. A starting point to embracing MBSE at scale is to onboard and upskill existing engineers on MBSE. MBSE use is not just for product model creation and architectural trade-offs, but also serves as a reference framework as products are validated, mass produced, and serviced. Too often application training explains the “how” without explaining the “why” and the “what.” MBSE is not another silo of experts creating another abstraction to make early product decisions. Applied correctly, it can enable

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whole new ways of developing products faster.

Accenture Helps Companies Needing to Embrace MBSE

Accenture understands how to make MBSE real in a full digital experience: integrating SE and PLM as CIMdata has defined them. Helping their clients acquire the skills and mindset to change their companies to make the MBSE story true is the hallmark of Accenture’s new MBSE practice.

Using the Integrated MBSE capabilities from Dassault Systèmes 3DEXPERIENCE platform Accenture provides experienced practitioners teaching their clients what MBSE is and how best to apply it. The steps summarized in Figure 2 focus on helping interdisciplinary teams understand MBSE and then apply it throughout prototyping and production.

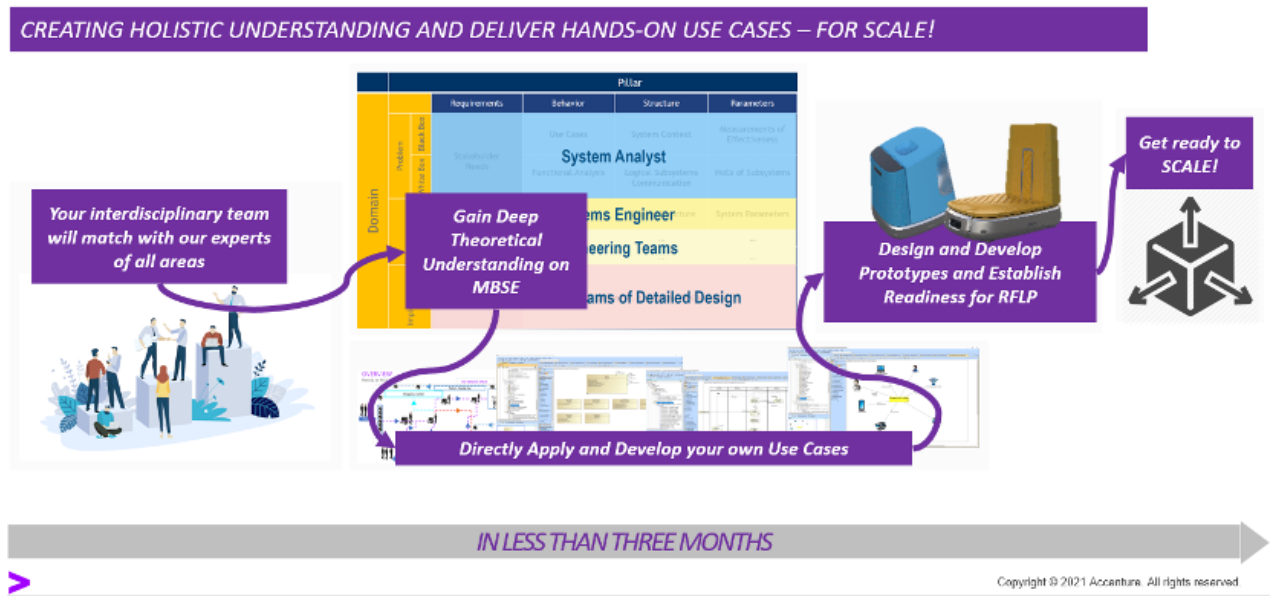


Figure 2—Making MBSE Work at Scale
(Courtesy of Accenture)

“From Zero to Hero in MBSE” is a story Accenture created that illustrates the application of MBSE at a startup company filling a need for a safe, robotic airport luggage carrier—driven by social distancing needs during the pandemic. They produced their first products in 10 weeks with Accenture’s MBSE training program applied during product development—making it real and relevant. Using MBSE models during validation drove success with an in-situ mockup in the airport lounge environment, shown in Figure 3. Applying MBSE models to the many usage scenarios helped to speed dynamic virtual validation.

The company attributed their success to Accenture’s experience in consultative practices and the focus on institutionalizing MBSE. They experienced the value of MBSE on relevant System of Systems use cases—from stakeholders needs to system requirements and system models—combining product, service, connectivity, and business models. They succeeded in creating and operating a well-integrated MBSE culture with one of the most capable PLM environments, even as the workforce collaborated from remote working locations.

Conclusion

As a major global systems integration and consulting firm, Accenture can support a wide range of customer initiatives, from major transformation programs where they leverage the vast capabilities of

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the Industry X practice down to initiatives focusing on important issues like MBSE.



*Figure 3—Virtual Mockup In-Situ Speeds Virtual Validation
(Courtesy of Accenture)*

Today’s product complexities require a comprehensive MBSE approach well integrated in a PLM ecosystem enabling all engineers and managers to create and view systems models to help assure product success in the shortest time to market. Accenture has a new MBSE practice that is helping companies not just learn what MBSE is and how to create models but also helping refine the adopting a company’s culture to use MBSE models through development, production, and service. Support from MBSE experts and focusing on applied learning and practice improves organizational adoption.

Considering people, process, and tools is essential to applying new product development techniques. PLM’s digital twins have richer insights with the use of MBSE providing contexts beyond the product’s 3D model and assembly. Accenture’s track record of helping companies address skills with training and coaching, making sure it takes hold by applying an expert practice, and measuring and adjusting key processes with feedback provide the basis for long standing organizational evolution. CIMdata’s recommends considering Accenture Consultive Services to support industrial MBSE efforts at any level but their expertise and approach is particularly valuable when MBSE is new to the organization, or the skills required do not exist within the organization.

CIMdata’s Craig Brown to Present at Altair’s Future.Industry 2021 Event

6 October 2021

CIMdata, Inc., the leading global PLM strategic management consulting and research firm, announces that Craig Brown, Executive Consultant, will make a presentation in the Advanced Manufacturing Track of Future.Industry 2021. The presentation will take during day 2 of the event on Wednesday, October 20th. The presentation, “How Key Technologies are Converging for a Smarter, More Connected World,” will share findings from a recently conducted survey that asked respondents to share their

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experiences with digital design tools.

Future.Industry is a virtual event that will explore and discuss trends, technologies, and breakthrough achievements that will deliver a smarter, more connected, and sustainable world. The event will take place on October 19-21.

To learn more about the event and to register for free, visit <https://www.cimdata.com/en/events/cimdata-supported-events/event/644-future-industry>.

CIMdata's PLM Certificate Standard Program® Available Virtually in December

7 October 2021

CIMdata, Inc., the leading global PLM strategic management consulting and research firm, announces that the PLM Certificate *Standard Program*® will be offered this coming December as part of the firm's Virtual-Live PLM Certificate Program offerings.

Early in 2020, CIMdata added the virtual-live PLM Certificate *Core Program*® to its PLM Leadership curriculum. This move provided a way for the broader PLM community to experience CIMdata's world-class PLM education opportunities without leaving the office or plant. That need still exists; however, many PLM Professionals seek to enhance their PLM education and have asked CIMdata to offer its de facto industry standard PLM Certificate *Standard Program* as a virtual-live program.

CIMdata will offer the PLM Certificate *Standard Program* through its virtual-live platform from December 6-19. The program, which leads to a Standard Certificate of PLM Leadership, will take place in a series of 4-hour sessions over nine consecutive business days. Topics covered in this program include:

- PLM Basics (three self-paced online modules taken before the virtual-live session)
- PLM Key Concepts & Learnings
- PLM Benefits & Potential Value
- PLM Strategy & Solution Definition
- PLM Solution Evaluation & Selection
- PLM Implementation, Monitoring & Continuous Improvement
- PLM Process Development & Testing
- Integrating PLM within the Enterprise
- Expanding PLM Across the Value Chain
- Configuration Management's Role in PLM

CIMdata will also offer the PLM Certificate *Core Program* at this time. Furthermore, existing graduates of the *Core Program* will have the opportunity to convert their Core Certificate of PLM Leadership to a Standard Certificate of PLM Leadership by participating in the last four days of the *Standard Program*.

Commenting on the decision to offer the PLM Certificate *Standard Program* virtually, CIMdata's president and CEO, Peter Bilello, said, "CIMdata's expansion of our education and training offerings to a virtual-live platform has been extremely successful; demand has been very high." Mr. Bilello added, "CIMdata has been working with the PLM industry for close to 40 years. Our consulting services and research expertise are known and respected around the world for their best practice-based content. CIMdata's educational offerings draw on this vast knowledge and experience. As part of our consulting business, we regularly hear about the need to expand our virtual PLM education offering to an industry

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“standard” level. Offering the PLM Certificate *Standard Program* virtually this December allows us to respond to what we hear in the industry in a timely fashion.”

For more information on CIMdata’s PLM Leadership offerings, visit <https://www.cimdata.com/en/events/cimdata-plm-certificate-program>

CIMdata’s President & CEO to Participate in a Roundtable Discussion at PropelPLM’s Propulsion 2021 Event

4 October 2021

CIMdata, Inc., the leading global PLM strategic management consulting and research firm, announces that its President & CEO, Peter Bilello, will participate in a panel discussion to kick off day 2 of Propulsion 2021. The panel discussion will consider the premise, PLM & QMS - Better Together or Apart?

Propulsion 2021 is a virtual event for manufacturing and business leaders responsible for delivering products in a design anywhere, build anywhere, sell anywhere world. Attendees will learn how winning companies embrace new technology to deliver the innovation, speed, and adaptability needed to gain market share, grow profits and create superior customer experiences. The event will take place on October 12 & 13.

To learn more and to register for free, visit <https://www.cimdata.com/en/events/cimdata-supported-events/event/646-propulsion-2021>.

Free Webinar on Why an mBOM is Not Always the Single Source of Truth for Product Structures

5 October 2021

CIMdata, Inc., the leading global PLM strategic management consulting and research firm, announces an upcoming free educational webinar, “Why an mBOM Alone Isn’t Sufficient.” The webinar will occur on Thursday, 28 October 2021, at 11:00 a.m. (EDT) and will last for one hour.

Many of CIMdata’s industrial clients regard the mBOM (manufacturing BOM) as the single source of truth for product structures. The thought process is, “We build the product from the mBOM, so it must be the master BOM.” An mBOM may serve well as the master BOM for some relatively simple products; this is not the case when products become moderately complex, when they have a multitude of potential configurations, and when companies want to support capabilities, such as using the digital thread to support products throughout their lifecycles.

This webinar will delve into some of the issues and problems associated with the single source of truth viewpoint and offer ways to alleviate them. The webinar will also describe other BOMs critical to supporting systems design, digitalization, and digital thread.

Attendees at this webinar will:

- Learn about other BOMs and how to use them.
- Understand why the mBOM alone can’t support advanced product lifecycle concepts.
- Learn why the mBOM is too inflexible to support highly configured and variable products.
- Learn how to encourage groups to share knowledge.
- Better understand how PLM-enabling solutions can support multiple BOMs without the

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overhead of older processes.

- Learn about the best practices associated with better BOM structuring and management.

According to John MacKrell, CIMdata's Chairman and the host for this webinar, "CIMdata's consulting activities reveal that many organizations rely on an mBOM as the master BOM. Our experience shows that this leads to restrictions on what companies can accomplish in their product lifecycle environments. We believe that almost every company should be working towards a much more organized approach to how they manage BOMs and configurations to support configuring products throughout their lifecycles. This webinar is geared to provide useful guidance on this critical topic."

Mr. MacKrell has 40+ years of experience applying computer-based solutions to engineering and manufacturing, with more than 20 years of those years at CIMdata. He has held senior positions in product management, marketing, research and development, and consulting.

This webinar will be helpful to those involved in the product planning process, PLM team leaders and members, PLM users, product development engineers, manufacturing engineers, field service personnel, product managers, IT leadership, solution providers, and anyone wanting to learn more about PLM and BOM processes.

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/events/webinars/event/647-why-an-mbom-alone-isn-t-sufficientew-event>. To register for this webinar, please visit <https://register.gotowebinar.com/register/2092180823456532240>.

New Normal: The Resilience of China's PLM Economy

An e-Works[1] comment on the PLM industry in China

7 October 2021

In 2020, China's GDP increased 2.3%, the slowest pace in more than four decades. However, during the COVID-19 pandemic, China's PLM market showed strong resilience with a growth rate of 9.4%.

Fast recovery from COVID-19

According to a report from the UN Department of Economic and Social Affairs (DESA), the world economy in 2020 shrunk by 4.3%, over three times more than during the global financial crisis of 2009. The Chinese economy grew 2.3% in 2020, which was the slowest pace in more than four decades. Even so, it was the only major growing economy in the world in 2020.

China's PLM market also showed strong resilience to overall economic forces. The overall PLM market size in China for 2020 was \$2.9 billion, an increase of 9.4% over 2019, according to the [China PLM Market Report](#) released by CIMdata.

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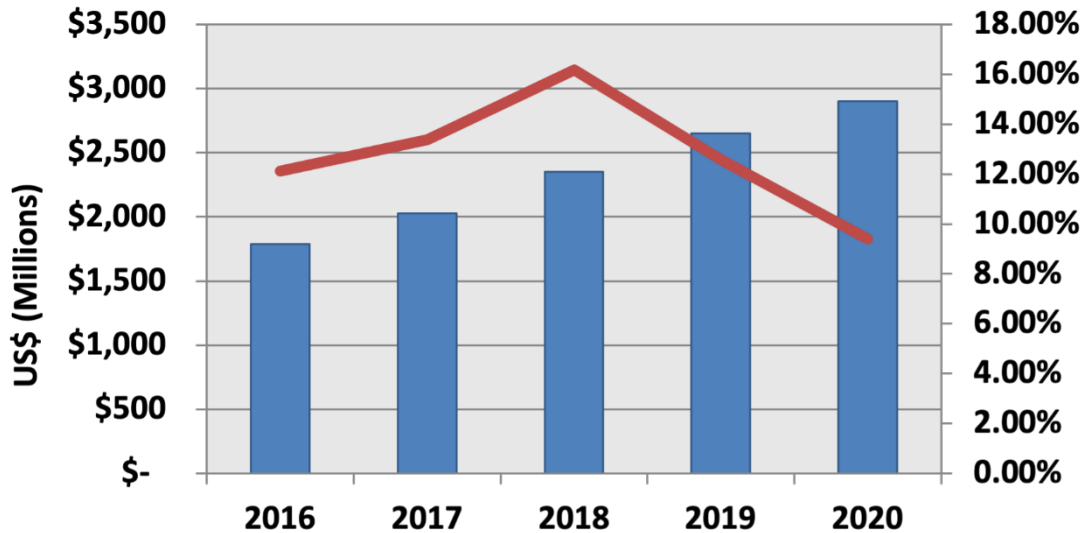


Figure 1 - China's PLM market growth trend for 2016-2020

“Despite shocks caused by the COVID-19 pandemic, China’s PLM market revived in the second half of 2020. Many manufacturing enterprises started increasing their PLM investments to drive digital transformation,” said Dr. Pei Huang, e-works CEO.

e-works, CIMdata’s long-term strategic partner in China and the best-known smart manufacturing portal and research organization headquartered in Wuhan, rapidly transformed to online training during the COVID-19 pandemic and hosted 181 webinars with over 1.7 million attendees in 2020. In the second half of 2020, it resumed in-person forums and conferences and held 11 large events, including a grand international forum with 1,500 participants in Wuhan. In September 2021, over 1,200 participants attended the same forum again in Wuhan, despite several people contracting the COVID-19 Delta virus in Wuhan in August 2021. “On the whole, China's PLM economy is back to normal,” said Dr. Huang.



Figure 2 - Wuhan International Smart Manufacturing Forum hosted by e-works on September 9-10, 2020, in Wuhan, China, with over 1,500 participants.

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The growing chance for PLM solution providers

The COVID-19 pandemic caused Chinese manufacturers to accelerate their innovation and product development. Many manufacturers increased their investment in 3D design and simulation. Some large enterprises have shown great interest in cutting-edge technologies such as BIM, MBD, MBSE, Digital Twin, and generative design. Some pioneers started to apply digital thread.

The increasing demand in the market has brought new business opportunities to mainstream PLM solution providers such as Siemens Digital Industries Software, Dassault Systèmes, PTC, Autodesk, Hexagon, AVEVA, Ansys, Altair, ESI, Synopsys, and Cadence. Local industrial software companies received more funding and investment, especially in 3D CAD/CAE/EDA. Additionally, digital twin enablement has come under the spotlight, and local VR/AR providers have emerged.

The capital markets start to show a preference for PLM solution providers

In March 2021, ZWSOFT was listed on the SSE STAR Market, becoming the first listed Chinese company in engineering design. Its current market value exceeds \$4 billion. Hoteam Software launched CrownCAD, a native cloud-based CAD system, in September 2021, after completing several rounds of financing. Recently, the company received over \$30 million in a new round of funding. New Dimension Systems closed a Series A round of financing for over \$10 million. Proceeds will advance its core expertise in 3D CAD modeling, complex surface modeling, CAE pre-and post-processing, Web3D lightweight model, large-scale software architecture, and industrial cloud platform. Transemic Technology, a partner of Siemens, raised more than \$10 million in a Series C round of funding. X-EPIC, a leading local EDA software and system provider, raised close to 200 million CNY in Series Pre-A and Pre-A+ financing to accelerate the product development of eDA2.0.

Earlier this year, E-lead, a local PLM software and service provider, completed a Series A round of financing. They plan to use the funds mainly for the development and market expansion of its self-developed platform, eRDP. Finally, Emphyrean Technology, a local EDA solution provider, also listed on the SSE STAR Market.

Innovative domestic software and solutions were launched

The percentage of service revenue also increased in 2020 in the China PLM market. Local service partners of the global mainstream PLM leaders are developing rapidly with the expansion of the PLM ecosystem.

Domestic PLM solution providers began to develop unique and integrated solutions to increase their competitive advantage. PERA Global has launched its simulation software, PERASIM, and cloud platform. In addition, Glaway Software released an independent industrial software named REACH; Yond-e launched an independent industrial software—Dex2.0; Hoteam Software released a SaaS-based 3D CAD software called CrownCAD; and Tianyu Software developed a 3D browser.

Several other domestic PLM solution providers, including CAXA, KMsoft, Gstarsoft, Global Crown Technology, SIMP, E-lead, JWI Software, INTESIM, RAINFE, Corilead, Litosim, Orient, Lan-you Technology, and Gant Software, have also launched PLM platforms and associated solutions.

New opportunities for the leading global solution providers in China

Global PLM solution providers are still leading the Chinese market. Siemens, Dassault Systèmes, Autodesk, Ansys, PTC, Synopsys, and Cadence all show strong performance and make up the majority of China's PLM market. Using the MCAD Multi-Discipline segment as an example, Siemens, Dassault Systèmes, and PTC account for more than 90% of this market in China. Ansys and Synopsys are respectively the leader in their field of Simulation & Analysis and EDA in China.

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From a business model perspective, led by the international mainstream providers, subscriptions are gaining wider acceptance in China. Subscriptions to Creo and AutoCAD are increasing rapidly.

“With the continuous promotion of Smart Manufacturing and industrial software applications, the Chinese PLM market will continue to provide a promising prospect and enormous opportunities for international PLM solution providers. Given the strong resilience that the market has shown during the COVID-19 pandemic, we expect China’s PLM market to be back on track again in 2021 with double-digit growth,” said Dr. Huang.

[1] e-works is CIMdata’s long-term strategic partner in China. For more information visit <http://www.eworksglobal.com/>

Acquisitions

Accenture Acquires Advoco, Scaling Capabilities for Intelligent Asset Management Solutions

5 October 2021

Accenture has acquired Advoco, one of the largest systems integrators for Infor EAM, a leading software-as-a-service suite for enterprise asset management (EAM). The acquisition expands Accenture’s capabilities to help clients in the consumer goods & services, industrial, life sciences, transit and other industries make their operations and supply chains safer, more sustainable, productive and cost-efficient. Terms of the acquisition were not disclosed.

Advoco’s mission is to form trusted advisor partnerships with clients across industries. It specializes in configuring and integrating Infor EAM software with companies’ existing enterprise and operational systems, and EAM training programs. The solutions and services Advoco provides are designed to help clients enhance the reliability and extend the overall lifecycle of their critical assets.

Founded in 2002, Advoco has been repeatedly named Infor EAM Partner of the Year. Most of its over 100 asset management professionals are based in Greenville, SC, close to the Infor EAM product development team. Accenture plans to establish Advoco’s Greenville office as a center of excellence for Infor EAM delivery, industry use cases and intelligent asset management.

The entire Advoco team joins Accenture’s Industry X group in the United States, strengthening its suite of services for digitizing clients’ engineering and maintenance functions, factory floors and plant operations.

“Many of our clients are looking to leverage Infor EAM when embedding more intelligence in their asset management to drive the performance of their most critical assets,” said Nigel Stacey, global lead for Accenture Industry X. “Advoco is highly respected for its talent, expertise and training program in this space. Together, we will bring Infor EAM capabilities to clients at scale to take advantage of a growing market opportunity.”

Marty Osborn, partner at Advoco, said: “Becoming part of the Accenture Industry X family is an incredible opportunity for our clients and our employees. Accenture’s capabilities and expertise enable us to bring more cutting-edge, innovative work to our clients and grow as a team and as individuals. We’re excited to deliver outstanding expertise in the design, consultation and implementation of Infor EAM to even more companies and markets.”

Advoco is the latest in a series of 24 acquisitions Accenture has made since 2017 to build its Industry X

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capabilities. Recently completed acquisitions include international engineering consulting and services firm umlaut, operations technology provider Electro 80 (Australia), industrial robotics and automation services provider Pollux (Brazil), operations consultancy Myrtle (US) and technology consultancy SALT Solutions (Germany).

Computer Guidance Welcomes Safran Holding AS to JDM Technology Group

5 October 2021

Computer Guidance Corporation, the leading developer of ERP software solutions for the construction industry, announced that its parent company, JDM Technology Group, has acquired Safran Holding AS. The Norwegian-based software company provides powerful risk, project and portfolio management software specifically for the construction industry.

Safran's world class software enables businesses to precisely plan and execute complex projects across industries including oil and gas, engineering and construction, aerospace and defense, utilities, and the public sector. Safran has offices in New York, London, and Oslo, with an international sales team based in the UK, and a network of partners and resellers.

Majority shareholder Progressus, a PE fund, which invested in Safran in 2012, supported the company and its strategy to widen its software portfolio, increase geographical footprint, and diversify into industries beyond the oil and gas sector.

Safran will join a growing group of industry leading software makers within the JDM Technology Group. Known for its customer focus and commitment to creating exceptional software for the built environment and having acquired numerous companies since 2004, the JDM Technology Group has a proven strategy for integrating acquired companies into its existing infrastructure.

"We are very pleased to add Safran's exceptional risk analysis and project management software to our portfolio," said Jim McFarlane, CEO of the JDM Technology Group. "Our global buy and build strategy ensures that we will continue to grow Safran's products, brand, and organization, and provide great service and support for its current and future customers. As a private, family business we focus on the long-term. This strategy continues to make the JDM Technology Group an excellent home for software companies."

"Safran Holding AS has a well-established reputation as an industry-leading software provider in the construction space and we are proud to welcome them into the JDM family," said Mike Bihlmeier, President, Computer Guidance Corporation.

Hexagon Completes the Acquisition of Infor's EAM Business and Has Resolved on an Issue in Kind

1 October 2021

Hexagon AB, a global leader in digital reality solutions, announced the completion of the previously announced acquisition of Infor's global EAM (enterprise asset management) business and has resolved on an issue in kind of consideration shares. Completion of the transaction was subject to regulatory approvals and other customary closing conditions, which have now been obtained.

The best-in-class, SaaS-based asset management solution, Infor EAM, is used to track assets, digitalise maintenance operations and enable customers in nearly any industry to reach optimum operational efficiency. Infor's EAM business is expected to generate 2021 revenues of 184 MUSD, of which over 70 per cent is recurring, with an adjusted operating margin of over 40 per cent after integration. Infor's

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EAM business is driving a transition of its customer base to SaaS, which is expected to be over 40 per cent of revenue in 2021 (over half of software revenues) and has been growing at a trailing 3-year Compound Annual Growth Rate (CAGR) of approximately 35 per cent. Given the strong fit of Infor EAM across Hexagon's businesses, the transaction is expected to generate significant sales synergies, growing to approximately 100 MUSD by 2026.

Transaction details

Under the terms of the agreement, Hexagon AB has paid 792 MUSD in cash and issued 132.6M series B shares to Infor, a Koch Industries, Inc. subsidiary, in accordance with the mandate granted by the Annual General Meeting 2021. The total purchase price amounted to 2,820 MUSD based on a closing price of 133.85 SEK per share, on a cash and debt free basis. Infor thereby now owns 4.9 per cent of the equity and 3.6 per cent of the votes in Hexagon AB. Hexagon's main shareholder, MSAB, has the intention of suggesting Brett Watson, President of Koch Equity Development, LLC, to the Hexagon nomination committee for nomination to the Board of Directors as soon as feasible.

After the non-cash issue, Hexagon's share capital now amounts to 85,761,451 EUR, the number of shares amounts to 2,705,477,888 and votes amounts to 3,697,727,888. Including the new shares, the acquisition is expected to be accretive to Hexagon's adjusted earnings per share (before Purchase Price Allocation (PPA) and other non-cash purchase accounting adjustments).

Key facts:

- Total purchase price of 2,820 MUSD on a cash and debt free basis of which:
 - 792 MUSD in cash
 - 132.6M Hexagon AB series B shares corresponding to approximately 2,028 MUSD, based on a share price of 133.85 SEK per share
- The cash consideration is fully financed via existing and new debt facilities and the proforma net debt to EBITDA ratio for the second quarter 2021, including the transaction, amounted to 1.66
- Non-recurring transaction and integration costs, including non-cash impairments related to overlapping technologies, of 161 MEUR will impact the income statement in the fourth quarter 2021
- Revenue recognition adjustment of deferred revenue of 14 MEUR will negatively impact the income statement during the coming 12 months
- Surplus values in the purchase price allocation (PPA) are estimated to 600 MEUR and will be amortised over 15 years

Stratasys to Acquire Outstanding Stake in Xaar 3D to Accelerate Production-Scale Additive Manufacturing Capabilities

6 October 2021

Stratasys Ltd., a leader in polymer 3D printing solutions, announced it has acquired all remaining shares of Xaar 3D Ltd. from Xaar plc (LON: XAR), accelerating the company's growth in production-scale 3D printing. Stratasys previously owned a 45% stake in Xaar 3D.

In April 2021, Stratasys introduced the Stratasys H350™ 3D printer, the first system powered by Xaar 3D's powder-based SAF™ technology. Representing the culmination of more than 10 years of research and development, SAF-based 3D printers are designed to deliver cost-competitive parts at production-level throughput. Since the announcement, the H350 has been successfully installed at Stratasys Direct

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Manufacturing and various beta customer sites in Europe and the U.S., with general availability expected before the end of this year.

“We are committed to being the leading provider of production-scale polymer 3D printing for our customers as additive manufacturing continues to transform industries around the world,” said Stratasys CEO Dr. Yoav Zeif. “The H350 printer and SAF technology are central to that mission, giving us a powerful platform for meeting the needs of customers in industries such as commercial goods, automotive, consumer goods, and consumer electronics. Customers tell us this technology’s consistent performance at higher volumes helps them grow their businesses and provides them a significant competitive advantage. We are excited to welcome the outstanding team of innovators from Xaar 3D to the Stratasys family.”

H Series™ Production Platform printers such as the H350 are designed to deliver part quality, consistency, and reliability that ensures customer satisfaction and high production yield. Using SAF technology, the printers execute key 3D printing steps in the same direction across the print bed to provide a uniform thermal experience – and therefore part consistency – for all printed parts regardless of their placement in the build. This represents a significant improvement over traditional powder-bed fusion processes.

H Series printers are also designed for production control. Leveraging multiple on-board sensors, build data is logged for process traceability and remains fully under customer control. Materials can be controlled, tracked, and traced, and print settings can be fine-tuned for each customer’s needs.

The Xaar 3D team will join Stratasys to continue leading the development of the H Series platform and SAF technology.

“We formed Xaar 3D on the premise that we could help existing powder bed technology make a major leap forward, and that’s what’s happening thanks to SAF technology,” said Ronen Cohen, General Manager of Xaar 3D Ltd. “We have been able to significantly improve thermal management for more consistent and reliable parts while giving customers the production control they need. As part of Stratasys, we will continue to rapidly advance H Series 3D printer development while leveraging Stratasys’ global go-to-market infrastructure and blue-chip customer relationships to enable more customers to benefit from SAF-powered additive manufacturing.”

The Cohesive Companies Expand in Transportation Infrastructure Globally with Acquisition of OXplus and through Executive Succession

5 October 2021

The Cohesive Companies, a wholly-owned but independently operated digital integrator business unit of Bentley Systems, Incorporated (Nasdaq:BSY), the *infrastructure engineering software* company, today announced its acquisition of OXplus, the leading rail asset management specialist headquartered in Veghel, Netherlands. The acquisition coincides with the appointment of Dr. Mark Bew MBE as CEO of The Cohesive Companies, succeeding Noah Eckhouse, who has retired after 17 years of exemplary service within Bentley Systems capped by the successful convergence, from multiple predecessor organizations, of The Cohesive Companies in 2020. OXplus becomes the sixth brand to enter The Cohesive Companies fold in support of its mission to deliver the strongest social, economic, and environmental outcomes for infrastructure clients and their constituents.

OXplus supports rail owners, operators, and maintainers, and rolling stock manufacturers around the globe with digital tools and solutions that give them a deep insight into the performance of their assets. It builds smart systems, and delivers standout client experiences, that use IoT data to effectively predict

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when repair or intervention is needed, that prevent downtime, that reduce operational costs, and that enable efficient scheduling of assets. The acquisition of OXplus, founded in 2010, will accelerate The Cohesive Companies' expansion of its Enterprise Asset Management presence within Europe and elsewhere. For instance, OXplus has recently supported the prestigious Riyadh Metro project, the largest single-phase metro project underway globally, and is also supporting Siemens Mobility to efficiently execute the maintenance of Riyadh Metro's new train fleet.

Bew joined Bentley Systems and The Cohesive Companies with its 2020 acquisition of the UK-based built-environment consultancy PCSG, providing digital advisory services and solutions to world-leading owners and operators in the transportation sector. Representative clients and projects include HS2, Europe's largest infrastructure project, in developing a digital twin of the entire rail system; Highways England (National Highways), operator of the UK strategic road network; and Heathrow Airport Ltd. Prior to his co-leadership of PCSG, Bew held information and business system leadership roles with Costain and URS-Scott Wilson. Based in London, Bew also chaired the UK government's BIM Task Group, which led the work to embed digital techniques and processes within major UK public sector infrastructure programs.

In a further appointment, George Church has been named COO of The Cohesive Companies. Based in Boston, USA, Church brings a depth of knowledge and expertise gained through 27 years at Bentley Systems, including as senior vice president of its professional services business.

Mark Bew said, "We are delighted to welcome the OXplus team to enhance The Cohesive Companies' balance across geographies and sectors. Our collective success and learning curves in delivering projects while working fully virtually throughout the pandemic has proven our growth strategy in globally bringing together and further attracting world-class talent resources. I take the helm from Noah Eckhouse enthusiastic about our unique strengths as a full lifecycle digital integrator, delivering transformational outcomes across the built and natural environment, independent of our clients' investment choices among technology vendors. It is particularly meaningful to me that OXplus' proficiencies in rail and transport operations and service optimization now helps us be able to fulfill the vision, expressed through the UK public sector's digital twin aspirations, for improved social benefits from infrastructure."

OXplus CEO Henri Snijders said, "We are excited that OXplus is joining The Cohesive Companies to strengthen our position as a leading digital consultancy in the railways and transportation sectors. I would like to thank all the team at OXplus for their work and dedication in making this milestone possible."

Richard Van Dongen, OXplus CCO, added, "Advancements in going digital are driving improvements on major railways projects leading toward the breakthrough advantages of infrastructure and of rolling stock digital twins. We know that together, we can deliver even more operational value for the transportation sector."

Company News

Atos becomes 01Talent's technology partner in Africa to identify, train and connect the digital talent of tomorrow to jobs

6 October 2021

Atos and 01Talent announce the launch of a strategic partnership to support the acceleration of the digital transformation in Africa, by enabling the dissemination of a high-quality, innovative and

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inclusive training program on the continent.

01Talent's ambition is to identify, train and connect one million high-level developers to the professional world by 2035. Through this partnership, 01Talent will be able to draw on Atos' technological resources to support the many projects underway.

In order to complete the pan-African campaign designed to identify future digital talent, 01Talent, in partnership with the Didier Drogba Foundation and UCLG Africa (United Cities and Local Governments Africa), will rely on a technological platform developed by Atos to host cognitive tests.

These online tests will be mini-games accessible to all, requiring no prior coding experience. They will provide a measure of the cognitive skills, creativity and motivation of candidates, and to identify high-potential profiles who could not have been spotted by traditional education systems.

The students of the future "Zone01", selected this way by the tests, will be trained for 2 years to become high-level creative "Full Stack" developers, with a job at stake.

Zone01 Cabo-Verde, will be the first "Zone01" collective intelligence zone on the African continent, and is scheduled to open at Praia Techno Park in Cape Verde, early 2022. 200 young talent from Cape Verde and from 26 other African partner countries will be welcomed in this "Zone01" and will be supplied with laptops by Atos. This first "Zone01" will be the foundation for the deployment of the education program which aims to create more than 200 "Zone01" on the African continent.

Atos will also mobilize its employees around the world through a mentoring program to share expertise and give personal guidance to the students. This will give Atos an opportunity to create ties with Zone01 talent, and to hire many students during and after their training.

It has also been agreed that Atos will develop within the educational platform, a curriculum to improve and develop the skills of its employees, in immersion with the students of the future "Zone01".

"With this partnership, we reaffirm Atos' ambition to support the dynamics of the economic, social and environmental transformation of the African continent through training in digital skills. 01Talent's particularly inclusive and innovative educational offer is a concrete expression of this ambition, and we are proud to be able to support its deployment. This is an important step in the development of a digital sector in Africa" commented **Nouridine Bihmane, EVP and Director of Growing Markets at Atos.**

"We are very happy to give life to a partnership that will allow us to support and integrate the most promising digital talents into Atos' teams. Atos and 01Talent share the same values and the same goal: to develop human capital through an inclusive and sustainable approach in order to facilitate the digital and social transition of the African continent," adds **David Sultan, Vice President of 01Talent in charge of Global Operations.**

"Atos in Africa is fully mobilized to ensure the success of the student selection campaign and to continue this collaboration over the long term. At a time when the continent is going digital, attracting talent is becoming a major strategic focus for our development," adds **Alpha Barry, Director of Atos in Africa.**

After Cape Verde, Atos and 01Talent will develop their partnership with the opening of new "Zone01" on the African continent, in particular in Senegal.

Capgemini deepens collaboration with Copado to accelerate customer experience (CX) transformation on the Salesforce platform

30 September 2021

Capgemini announced an alliance with Copado, a leading DevOps platform for enterprise Software-as-

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a-Service (SaaS) to accelerate CX transformation for their clients and enhance returns on Salesforce investments. The alliance will combine Capgemini's expertise in managing complex and large-scale Salesforce transformation projects, with Copado's DevOps platform to provide clients with reliable, automated and structured Salesforce implementations that offer reduced development costs and provide faster, more agile deployments.

As part of the alliance, Capgemini will leverage Copado's suite of offerings and set up a DevOps Center of Excellence (CoE) with Copado, to deliver native Salesforce and MuleSoft DevOps capabilities to its enterprise clients.

"In today's fast paced business ecosystem, our clients are looking for agile and efficient, customer-focused digital solutions to enable an experience transformation journey. We're committed to helping organizations unlock the true potential of their business transformation initiatives. This alliance with Copado further strengthens our partner ecosystem and adds to our focus on delivering agile and innovative customer experiences, at scale, for our clients," commented Darshan Shankavaram, Leader of the Global Digital Customer Experience Practice at Capgemini.

With over 10 years of experience in enabling Salesforce implementations, Capgemini provides a full suite of offerings including strategy, program management, development and implementation support to its clients to drive outcomes across sectors globally.

"Digital customer experience is no longer a buzzword, it's the core of business resilience today. Salesforce projects are transformational, and in every industry, organizations must capture the benefits of Salesforce innovation quickly," said Andrew Leigh, Chief Marketing Officer and Head of Alliances for Copado. *"Capgemini's expertise in managing large-scale Salesforce deployments and its leading application development services, combined with Copado's DevOps and testing automation technologies, can help organizations around the globe save on software development costs, increase time-to-value on cloud releases, and quickly capture all the benefits that cloud and digital transformations promise."*

The new, deeper alliance, expands Capgemini's relationship with Copado which, over the last twelve months, has established a set of successful joint client projects with a particular focus on the telecommunications industry, such as TET (Latvia Technology and Entertainment Company).

"Together with Capgemini and Copado, TET is undertaking a digital transformation initiative that will help optimize our business and move key business operations to a state-of-the-art Customer Relationship Management (CRM) system, built on Salesforce. With Copado, we can execute several deployments simultaneously and transparently, allowing the product owner to have full visibility of deployment and testing status. This empowers us to deliver more customer value per quarter and ensure faster time to market, as compared to complex and time-consuming manual deployments. The ability to integrate testing tools with Copado has also allowed us to create a continuous integration and deployment pipeline, enabling us to focus on delivering business value rather than technical issues," said Dmitrijs Nikitins, Chief Technology Officer at TET.

As part of Capgemini's commitment of nurturing promising B2B startups offering innovative technological solutions, Capgemini invested in Copado via ISAI Cap Venture in June 2020 and September 2021. With its Series C round of funding, Copado has become the second 'unicorn' within the Capgemini portfolio.

Dassault Systèmes Launches 3DEXPERIENCE Edu Centers of Excellence, Its Global

Program to Empower the Workforce of the Future

8 October 2021

- New program provides businesses and governments with a network of centers for experiential, lifelong learning with the 3DEXPERIENCE platform to accelerate the digital transformation of industry
- Unique virtual/real learning experiences combining the 3DEXPERIENCE platform and state-of-the-art machinery enable students and professionals to thrive in fast-changing jobs
- Five centers in France, India, Mexico and the US have already joined the program to strengthen interactions between academia and businesses

Dassault Systèmes announced the launch of 3DEXPERIENCE Edu Centers of Excellence, a global program to provide students, professionals, learners, businesses and governments with a network of centers dedicated to experiential, lifelong learning with the 3DEXPERIENCE platform that enables the current and future workforce to accelerate the digital transformation of industry.

The program answers a global need to prepare students and professionals with the knowledge and know-how to thrive in emerging and fast-changing jobs in sectors such as manufacturing, healthcare and life sciences, and infrastructure and cities, where digital technologies are converging to impact every aspect of industrial business – from ideation to manufacturing.

The first centers to join the program – CampusFab and the Trades and Qualifications of Excellence Campus - South (CMQE-SUD) cluster in France, the K-Tech Center of Excellence in Aerospace & Defense in India, the Composites Manufacturing Simulation Center of Purdue University in the U.S., and the Industrial Innovation Center for Aerospace (CIIA) in Mexico – operate closely with employers in the aerospace, automotive, energy and electronics industries. Backed by government funding, the centers and their industrial partners collaborate to enable new learning models structured by digital practices that elevate the skills of the local workforce.

Centers that join the 3DEXPERIENCE Edu Centers of Excellence program are equipped with the expertise to offer unique learning opportunities combining virtual worlds on the 3DEXPERIENCE platform with state-of-the-art machinery used in the workplace, as well as courses and curricula designed in collaboration with local employers and taught by platform-certified instructors. Students, operators, technicians, engineers and innovators can boost their employability by developing in-demand skills in virtual twin processes, materials science, data-driven manufacturing and other areas, in the context of existing or future job roles.

“Creating learning facilities that continuously adjust to the rapid transformation of industries can only be achieved by combining efforts from government, local employers, academia and technology providers,” said Florence Verzellen, Executive Vice President, Industry, Marketing & Sustainability, Dassault Systèmes. “The 3DEXPERIENCE Edu Centers of Excellence program leverages our experience in collaborative learning programs and in the continuous reinvention of industry practices with the 3DEXPERIENCE platform at their core. Through this network of centers, we can strengthen these combined efforts and enable the emergence of new models for businesses, work and education.”

Dedicated to Teachers: TCS iON Launches Free Course on the Art of Question Paper Construction

4 October 2021

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TCS iON™, a strategic unit of Tata Consultancy Services (TCS) (BSE: 532540, NSE: TCS), a leading global IT services, consulting, and business solutions organization, is launching a free certification course for educators on the occasion of World Teachers' Day, titled 'TCS iON Career Edge – The Art of Question Paper Construction', to celebrate and express gratitude for their inspiring work.

This first-of-its-kind initiative has been taken to help the educator community design high-quality question papers and assessments that truly test students' learning, especially given the new assessment format announced by the CBSE and ICSE. The self-paced course will help teachers learn the art and science of drafting impactful questions and question papers in line with the Assessment Reforms of the National Education Policy (NEP) 2020.

Venguswamy Ramaswamy, Global Head, TCS iON, said, *"The last 16 months have been the most tumultuous time for educators across the country. Circumstances necessitated that we unlearn, learn, and adapt to new ways of teaching, and evaluating students. At TCS iON, we have been continuously working towards enabling schools, teachers and educators with tools, techniques, and solutions to help simplify their day-to-day job. On the special occasion of World Teachers' Day, we are elated to offer this free course to the teachers of India who are helping shape the future of our nation."*

The course, The Art of Question Paper Construction, was spearheaded by the late Prof HS Srivastava, a luminary in the field of educational evaluation and assessments, along with a large team of eminent experts.

Hexagon and ETQ connect quality solutions to help manufacturers bring superior products to market faster and protect brand reputation

5 October 2021

Hexagon's Manufacturing Intelligence division, a global leader in sensor, software, and autonomous technologies, and ETQ, a leading quality management system (QMS) provider, have announced a partnership to assure quality from concept to customer, enabling improved data-driven decision making throughout the entire process, producing better, more consistent products in less time and with less resource and enabling progressive smart manufacturing strategies.

The partnership connects Hexagon's vendor-agnostic inspection and measurement solutions with ETQ's stakeholder-connecting QMS to produce a rich digital thread that automatically captures quality control and assurance processes that are currently performed manually. By applying machine learning and artificial intelligence throughout design, production, customer service and support the cloud platform also helps users to rapidly identify and analyse issues by producing actionable insights.

Rob Gremley, CEO of ETQ, said: "Manufacturers in a range of industries – automotive, life sciences, heavy manufacturing and beyond – will derive immediate value from the integrated data thanks to higher product quality and fewer defects, scrap, rework or recalls. As the Smart Manufacturing environment evolves, this level of data-driven automation and integration will deliver the ability to maximize the quality and efficiency of the complete manufacturing lifecycle and create the foundation for autonomous manufacturing and true digital transformation."

Paolo Guglielmini, President of Hexagon's Manufacturing Intelligence division, said: "Consumers perceive quality based on their experience. It is the manufacturer's brand reputation, it can add significant value to a product, and it combines every aspect of the product lifecycle. Our customers trust our solutions to connect the shop floor to the top floor with pervasive quality assurance, and this new addition to our ecosystem will further support their journey towards Industry 4.0."

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An example of how the partnership will benefit customers today is in resolving a nonconformance incident, leveraging inspection and measurement data collected and managed by Hexagon's Q-DAS and eMMA software solutions with full traceability and best in class Statistical Quality Control (SQC) and Analytics, and integrated with ETQ Reliance's QMS.

Hexagon's existing quality control solutions can identify a nonconformance from, for example, the Production Part Approval Process, Failure Modes and Effects Analysis, or customer feedback, at which point the digital connection between that manufacturing solution and the ETQ QMS will autonomously generate a nonconformance report (NCR) without human intervention.

Typically, the action to halt or modify production of the faulty product is handled manually or with limited technological help, but with a combined Hexagon-ETQ generated NCR solution, a corrective action can be automatically triggered in production and the information simultaneously updated in the company's enterprise resource planning system to put the affected product batch on hold. This prevents the release and potential negative consequences of defects, efficiently digitizing the quality management process and providing an unprecedented degree of integration across the manufacturing lifecycle that supports smart manufacturing strategies and aspirations.

iPoint becomes ECO Platform member

8 October 2021

iPoint's MFA & LCA software enters the construction sector

We are proud to announce that iPoint-systems has joined the international non-profit association ECO Platform as a member. ECO Platform aims for mainstreaming life cycle assessments (LCA) for buildings and infrastructure projects by provision of reliable product data in an affordable and effective way. With our LCA tool Umberto and iPoint Product Sustainability, iPoint is an important addition to the ECO Platform.

A main objective of the platform is to promote and contribute to sustainable development, including a low-carbon economy and resource efficiency in the construction sector, by coordinating the development and provision of credible and scientifically correct data from products. The association is an umbrella organization for EPD (Environmental Product Declarations) program operators but involves other relevant stakeholder groups, e.g., LCA practitioners and tool providers – like iPoint. With the following software solutions for MFA (material flow analysis) & LCA (life cycle assessment), iPoint will extend the ECO Platform portfolio:

- **iPoint Product Sustainability**
With iPoint Product Sustainability – the new web-based generation of life cycle assessment software – companies can analyze the environmental impact of their products in less time while saving resources. Learn more [here](#).
- **Eco-Efficiency Software Umberto**
With the Software Umberto Efficiency+ and Umberto LCA+ iPoint offers the optimal solutions to reduce resource and energy consumption and optimize the environmental performance of products according to ISO 14040/14044. Learn more [here](#).

iPoint's representative at ECO Platform is Martina Prox, Director Sustainability Strategy at iPoint. Asked for the reasons for joining ECO Platform, Martina states: "Leveraging digitalization for sustainable change is iPoint's purpose – we see ECO Platform in a leading role bringing actors within the life cycle community together to agree on standardized and harmonized approaches for the exchange

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of life cycle information in machine readable formats across the supply chain. Only with fully digitized life cycles production systems across all industries will master the transformation of our economy ahead of us towards a truly digital sustainable circular economy.”

“The construction sector is a key player in achieving the UN Sustainable Development Goals, especially SDG 11, ‘Sustainable cities and human settlements’,” states Joerg Walden, CEO and founder of iPoint-systems. “We are looking forward to supporting ECO Platform with iPoint’s software solutions in their overall goal to establish an open international digital data network for building and construction LCA data.”

Learn more about the ECO Platform association [here](#).

LTI has Earned the Kubernetes on Microsoft Azure Advanced Specialization

5 October 2021

Larsen & Toubro Infotech, a global technology consulting and digital solutions company has earned the Kubernetes on Microsoft Azure advanced specialization, a validation of a solution partner’s deep knowledge, extensive experience and proven expertise in deploying and managing production workloads in the cloud using containers and managing hosted Kubernetes environments in Microsoft Azure.

Only the partners that meet stringent criteria around customer success and staff skilling, as well as pass a third-party audit of their container-based workload deployment and management practices, earn the Kubernetes on Azure advanced specialization.

Siddharth Bohra, Chief Business Officer and Head, Cloud and Data Products, LTI said: “Enterprises need ever increasing efficiency in operations, and cloud solutions make this continuous transformation possible. Microsoft is making it easier for organizations to adopt Kubernetes by bringing the latest learnings and best practices from working with diverse customers to Kubernetes community. Our latest specialization on Kubernetes service capabilities will provide the benefits of portability, agility, and scalability to our customers while modernizing their workloads.”

Rodney Clark, Corporate Vice President, Global Partner Solutions, Channel Sales and Channel Chief, Microsoft added: “The Kubernetes on Microsoft Azure advanced specialization highlights the partners who can be viewed as most capable when it comes to deploying and managing containerized applications in Azure. LTI clearly demonstrated that they have both the skills and the experience to deliver best-in-class cloud-native capabilities to customers with Azure.”

With over 75% of global organizations expected to run containerized applications in production by 2022, many are looking for a partner with advanced skills to migrate their existing containerized workloads to the cloud, or assist them in developing cloud-native applications using container technologies, DevOps patterns, and a microservices approach.

LTI is also a Microsoft Azure Expert Managed Services Provider, a recognition which provides customers an access to expert level service, a broader range of Azure services from IaaS to PaaS migrations, and many more benefits based on LTI’s strong partnership with Microsoft.

New and Improved Mastercam Certification Program

5 October 2021

Mastercam Certification is a rigorous set of knowledge-based and practical tests that demonstrate a programmer’s ability to work effectively with CAM software, overcome common issues facing today’s shops, and produce high quality finished parts. It indicates knowledge and expertise in the world’s most

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widely used CAM software. Certification is an achievement and credential that provides proof of skill sets and can open educational and career advancement opportunities.

There are many benefits of Mastercam Certification. Programmers and machinists who complete the Mastercam Certification program carry with them a useful means of quickly proving and validating their Mastercam skills in an increasingly competitive industry. And, for an employer, by hiring Mastercam Certified employees, you are guaranteed to get the level of experience and expertise you demand.

Certifications

Currently available are 2D Mill, 3D Mill, and Lathe certifications. Successful completion of these exams demonstrates the ability to explain and discuss the workflow for creating toolpaths, understand the workflow of taking a model and creating NC code, articulate the difference between standard and Dynamic toolpaths, and understand the geometry in Mastercam.

There are no eligibility requirements or prerequisites needed to take a Certification exam. Users are encouraged to utilize the training courses on Mastercam University, which contain lessons that cover the topics in the Certification exams. Mastercam Resellers can also be consulted for training options available, or the user's experience as a machinist/programmer may have already given them the skills and knowledge needed to succeed with the exams. works with any tooling supplier that bases their catalogue on ISO 13399, thus assuring the accuracy of geometrical information.

After passing an exam, users will earn a digital credential called a badge. A badge proves a passing grade on an exam, or a series of exams, verifying that their knowledge has been certified by Mastercam.

Oracle, TIM (Telecom Italia) and Noovle Announce Joint Plan to Offer Multicloud Services in Italy

8 October 2021

Companies aim to accelerate digital transformation of Italian enterprises

Oracle, TIM (Telecom Italia) and Noovle, TIM Group's cloud company, today announced that they have signed a collaboration agreement as part of a plan to offer multicloud services for enterprises and public sector organizations in Italy.

Under the agreement, TIM Group plans to utilize advanced cloud infrastructure technologies to support its goal of advancing Italy's digital modernization and establishing its position, through Noovle, as the market reference point for enterprise multicloud services in the country.

The three companies plan to bring their respective assets and expertise to develop and manage multicloud-architecture services for Italian enterprises. Noovle brings an extensive data center network in Italy, which has been developed to the highest technological, security and environmental standards in line with TIM Group's environmental, social and governance (ESG) goals. TIM provides an extensive sales network across the country, enabling the integration of cloud services with the Group's ICT services portfolio—from IoT and 5G services to cybersecurity and advanced fixed and mobile connectivity services. Oracle brings its [next-generation cloud infrastructure](#) with its built-in security, superior performance and availability, which is ideally suited for mission-critical and cloud native workloads in large enterprise and public sector environments.

A collaborative model, which includes connecting major cloud providers' platforms in a multicloud environment, will support public and private organizations in addressing the challenges of digital transformation through advanced multicloud services, enabling operational efficiency, lower costs, and high security standards. Oracle's hybrid and multicloud strategy also aligns closely with TIM Group's

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objectives in ensuring that all customer data is hosted in-country and customers have a cloud solution that meets their data sovereignty needs.

The companies today also announced that TIM has selected [Oracle Cloud Infrastructure](#) as part of its multi-cloud strategy to migrate the Group's mission-critical data management workloads to the public cloud.

In addition, TIM Group has selected [Oracle Fusion Cloud Enterprise Resource Planning \(ERP\)](#) to optimize its finance and supply chain processes and help grow new revenue streams.

“The collaboration with Oracle is a key element for accelerating our Group's transition to more flexible models and supporting the digitization of businesses and public administration. By adopting a multicloud model, we can enrich our offer of high value-added services, enabling our customers to promptly seize the best business opportunities while simultaneously improving efficiency. This partnership also broadens the portfolio of solutions brought to the market by Noovle along with other major cloud players, facilitating openness, interoperability and flexibility,” said Carlo d’Asaro Biondo, CEO, Noovle.

“We are pleased to be working with a major Italian operator in boosting digital innovation and the economic recovery of Italy. Oracle has a considerable footprint in highly-regulated and mission-critical enterprise and public sector environments, making us ideally suited to support customers with data-driven digital transformation objectives based on our secure and high-performing cloud,” said Fabio Spoletini, Senior Vice President, South Europe, Oracle.

Launched in January this year, Noovle SpA is TIM Group's dedicated center of excellence for cloud and edge computing, with a focus on supplying bespoke multicloud services to TIM customers.

SBI Deepens Partnership with TCS to Drive Innovation and Enhance Customer Experience

8 October 2021

Tata Consultancy Services Will Help Enhance SBI's Application Estate Around Core Banking Areas and Financial Inclusion for a Further Five Years

Tata Consultancy Services (TCS), a leading global IT services, consulting and business solutions organization, has announced that its long-standing partnership with State Bank of India (SBI), India's largest bank, has been extended for another five years as the bank embarks on its next leg of growth based on the three pillars of technology, resilience and people.

The extended partnership builds on a two-decades long relationship between the two partners, that began with the implementation of the TCS BaNCS™ core banking solution in 2001, the largest such transformational program of that era. As part of the new contract, TCS will continue to maintain and enhance SBI's application estate around core banking, trade finance, financial reporting, and financial inclusion with new features and functionality. This will support the bank's ability to launch newer offerings and respond to business and regulatory changes.

In addition, TCS will continue to leverage its deep contextual knowledge of SBI's business and technology landscape to help the bank with large transformation programs to help its customers realize their aspirations, and make their day-to-day banking accessible, intuitive, easy, and secure. In the most recent such engagement, TCS is helping build Bharat Craft – an omnichannel, online B2B e-commerce platform which would serve as a marketplace for MSMEs, jointly driven by SBI and the Government of India.

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Prior to that, TCS collaborated with SBI to plan and execute the simultaneous merger of five associate banks and Bharatiya Mahila Bank. The colossal undertaking involved integrating over 200 business processes, over 43 IT applications, 17,500 products, and over 50 billion database records, and impacting over 50,000 tellers across 7,000 branches. Immaculate planning and execution ensured accomplishment of all goals – without any interruption to services – in just six weeks.

“Technology and innovation have been at the core of SBI’s growth and transformation journey over the last two decades. TCS has been a valuable partner since the beginning and has supported us in building and running a high-performing, resilient and scalable core banking platform that is foundational to all our digital initiatives. We are pleased to extend our relationship with TCS as we continue to work together to launch new initiatives for enhanced customer experience,” said **Ravindra Pandey, DMD & CIO, SBI**.

“TCS’ two decades-long relationship with SBI is a testament to our customer-centricity and our approach of harnessing collective knowledge to create greater futures. We are delighted to continue this partnership as the bank embarks on its next wave of growth. We look forward to an exciting journey ahead, filled with energy, innovation, and a passion for excellence,” said **Ujjwal Mathur, Country Head – India, TCS**.

Uptake Appoints Kayne Grau as CEO

5 October 2021

Uptake, the leader in industrial intelligence software-as-a-service, announced the appointment of its President, Kayne Grau, to the role of Chief Executive Officer along with his election to its Board of Directors. Founder Brad Keywell will transition to the role of Executive Chairman of the Board. Grau’s expanded leadership role will focus on fortifying Uptake’s unique industrial intelligence while enhancing the ease of deployment and speed to value of Uptake’s products. Keywell will remain active in Uptake’s growth, continuing to establish and expand strategic relationships with customers, partners, and industry.

“I could not be more excited to pass the torch to Kayne as Uptake embarks on our next phase of expansion and growth,” said Brad Keywell, Executive Chairman of Uptake. “Kayne’s strong leadership as our President, his commitment to the excellence of Uptake’s industrial intelligence products, and his passion for our people and our customers have been integral to our growth and helped to position us for future success. Kayne brings both strategic vision and deep operational expertise to the CEO role, and I have the utmost confidence in him and our entire executive leadership team going forward.”

Since Uptake appointed Grau as President last September, the company has experienced significant customer growth. In February 2021, Uptake acquired ShookIOT, deepening its global footprint in the chemical, oil, gas, and process industries through cloud-native operational technology (OT) data management. With deployments in 20 countries, Uptake recently expanded its relationship with the U.S. Beverage and Frito-Lay fleets of PepsiCo. Uptake’s products are also now available in the Microsoft Azure Marketplace and have simple integration plug-ins to legacy systems, including IBM Maximo, SAP, Infor EAM, and Oracle.

“Uptake’s mission – framed by industrial intelligence delivered through proprietary data and easy-to-deploy, simple-to-use products – has galvanized industrial operators to harness the immense value within their data,” said Grau. “Today, Uptake is unique in its ability to transform messy and confusing industrial data into actionable insight. I am honored that Brad has entrusted me as CEO, and our entire team is focused on growth that builds on our momentum.”

CIMdata PLM Industry Summary

Prior to Uptake, Grau held various executive roles at KAR Global. He led the creation of its data analytics business unit and data products and services, extending its presence across physical, online, and digital auction marketplaces for used cars. Grau was previously the CEO at DRIVIN, a company he co-founded with Brad Keywell, until its acquisition by KAR in 2017. Before then, he served in various management roles at Music Dealers, Cars.com, Allstate, and Apartments.com, where he was CTO at the time of its sale to the CoStar Group in 2014 for \$585 million.

Looking toward the future of industrial analytics, Grau added: “Outcome-oriented insights from Uptake help companies in Chicago, across the U.S., and around the world optimize the investments they have already made. Our products are delivering verified results in ESG initiatives, helping operators calibrate CapEx and reduce OpEx, and creating new sources of visibility to enable greater reliability and productivity. Uptake prides itself on being a seamless partner to industries, accelerating digital transformation, and enabling increased sustainability while mitigating risk.”

Event News

Autodesk University 2021 Inspires Innovators to Achieve the New Possible

4 October 2021

Autodesk, Inc. will virtually welcome innovators from around the world to the company’s annual design and make conference, Autodesk University (AU) 2021. The global learning experience is specifically designed for experts within the fields of architecture, engineering, construction, product design, manufacturing, and media and entertainment – all leveraging Autodesk technologies to explore the new possible and advance their respective industries. The conference kicks off October 5 – 7, with additional regional learning and networking sessions scheduled October 8 – 14.

As the world continues to grapple with the effects of the COVID-19 pandemic, Autodesk will host its global event on a digital platform for a second consecutive year, helping to ensure the continued health, safety and wellbeing of Autodesk’s customers and extended community. AU 2021 programming has been reformatted for the virtual stage and will be available online for attendees at no cost.

Autodesk President and CEO Andrew Anagnost will kick off each morning of AU 2021 with a series of General Session keynotes. This daily content will explore Autodesk’s evolving role in empowering innovators across industries to solve problems, with a particular focus on the company’s vision and progress towards delivering platform-based solutions for its customers, built upon Autodesk’s existing Forge technology. The result will be a resilient and flexible set of cloud-based solutions that combine technologies, connect processes, automate workflows and unlock valuable insights for customers.

“Autodesk is constantly reshaping the ways we deliver value to our customers—to ensure we’re providing the tools needed to both meet the intensifying industry demands of today and propel those industries towards a more sustainable world that benefits everyone,” said Andrew Anagnost, president and CEO of Autodesk. “In building unified and industry-focused solutions on our Forge platform, we’re making an important investment in the resiliency of our customers. This year’s AU is an exploration and celebration of what’s possible as our software solutions become more flexible and fluent so that our customers are able to think creatively, collaborate efficiently and focus on their projects—not their products.”

In addition to AU 2021’s daily General Sessions, Autodesk leaders and industry innovators will take the virtual stage during the Design & Manufacturing (D&M), Architecture, Engineering & Construction

CIMdata PLM Industry Summary

(AEC) and Media & Entertainment (M&E) keynotes. These keynotes will cover industry news and the innovative ways Autodesk is working with real-world problem solvers to transform how things are built, engineered, manufactured, created and produced in service of a better world for all. AU 2021 attendees will also have access to hundreds of expert-led classes, live Q&A sessions, virtual networking opportunities and more.

This year's AU event also marks the official debut of the company's "Autodesk it" advertising campaign, highlighting the multitude of ways that innovators can partner with Autodesk to achieve better outcomes for their projects, companies and the world at large. This campaign is a progression of Autodesk's brand evolution, following the launch of the company's new logo and visual identity in September 2021. The brand campaign will launch in select markets in 2021, with plans to expand further in 2022 and beyond.

AU 2021 content will be available for on-demand viewing after the conference. Autodesk will also continue to provide full access to the AU Solution Marketplace, where attendees can discover new, innovative technologies and helpful workflows, and meet with industry experts from the global ecosystem of Autodesk partners and developers.

For the seventh consecutive year, AU will be a carbon neutral event in 2021—its virtual, low impact format reinforces Autodesk's longstanding commitment to sustainable operations. Earlier this year, the company reached net-zero carbon emissions across its business and value chain and set two new greenhouse gas emission reduction targets that align with the latest climate science.

Additional information about AU 2021 announcements, initiatives and developments can be found on the Autodesk blog beginning October 5.

Registration Now Open for Trimble Dimensions+ 2022 User Conference

5 October 2021

Trimble announced that registration is open for the Trimble Dimensions+ User Conference being held November 7-9, 2022 at the The Venetian Resort, Convention and Expo Center in Las Vegas, Nevada.

At Trimble Dimensions+ 2022, attendees will connect, learn and experience how professionals in construction, surveying and mapping, government, autonomy, forestry, utilities are using the latest technologies to transform and make work faster, safer, greener, more productive and better connected. In addition, there will be opportunities to network with key industry players and peers, nurture business relationships and build invaluable partnerships.

This unparalleled combination of education, technology and networking is a premier opportunity for industry professionals to share best practices, insights and real-world experiences with peers from around the globe. Conference highlights will include:

- Hands-on software training at hundreds of educational sessions
- Informative product demonstrations showcasing the latest solutions and workflows
- Unique Offsite experience to see the power of Trimble solutions at work
- Interactive Expo to showcase products, innovations and technical presentations from Trimble and its partners
- Inspiring keynotes, special events and networking opportunities

Financial News

WIPRO LIMITED TO ANNOUNCE RESULTS FOR THE SECOND QUARTER ENDED SEPTEMBER 30, 2021 ON OCTOBER 13, 2021

4 October 2021

Wipro Limited a leading global information technology, consulting and business process services company, will announce results for the second quarter ended September 30, 2021 on Wednesday, October 13, 2021 after stock market trading hours in India. The results will be available in the Investors section of the company's website.

At 7:15 PM IST* (9:45 AM US Eastern time) following the results announcement, the senior management will discuss the company's performance for the quarter.

The audio from the conference call will be available online through a webcast.

Dial in details for the conference call are as below

<i>Time</i>	<i>7.15 PM - IST* (9:45 AM-ET#)</i>
Diamond Pass™ is a Premium Service that enables you to connect to your conference call without having to wait for an operator. If you have a Diamond Pass™ click the above link to associate your pin and receive the access details for this conference, if you do not have a Diamond Pass™ please register and you will receive your Diamond Pass™ for this conference.	
Primary Access Toll Number	+91 22 6280 1120 +91 22 7115 8021
US Toll Free Number US Standby Toll Number	1 866 746 2133 1 323 386 8721
UK Toll Free Number UK Standby Toll Number	0 808 101 1573 44 203 478 5524
No passcode Required	

Please dial any of the above numbers five to ten minutes ahead of schedule. The operator will provide instructions on asking questions before and during the call.

The replay of the call will be available two hours after the end of the call on following numbers

Call Playback Numbers:

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	Phone Number	Passcode / Conference ID	Replay Dates
India Toll	+91 22 71945757 +91 22 66635757	Access Code: 947765#	13-Oct-21 to 12-Nov-21
International Toll	+1 8554360715	Access Code: 947765#	13-Oct-21 to 12-Nov-21

Invitation - presentation of Sandvik's report of the third quarter 2021

4 October 2021

Sandvik will publish its third quarter results on Monday, October 18, 2021 at approximately 11:30 PM CEST.

A combined webcast and conference call for investors, analysts and financial media will be held at 1:00 PM CEST.

The report will be presented in a webcast and conference call by Stefan Widing, President and CEO as well as by Tomas Eliasson, CFO.

The presentation will be broadcasted live on our website

Dial-in details for the conference call:

SE: +46 8 505 583 65

UK: +44 333 300 9271

US: +1 646 722 4904

From about 12:00 PM CEST presentation slides will be available on our website.

ESI 3-year strategic plan "OneESI 2024 – Focus to Grow"

5 October 2021

ESI Group announces its 3-year strategic plan focused on improving ESI Group's topline and profitability. This plan will be presented and commented on Tuesday, October 5th, at 3:30pm CET during an Investor Conference.

"This 3-year plan will enable us to focus where we deliver the most value and therefore drive growth and profit for ESI that benefits all our stakeholders. This plan is an important milestone for our company, and it mobilizes the talent and energy of my entire team. I am very proud to lead a diverse team and I'm really confident that together we can achieve the expected result."

Cristel de Rouvray

Chief Executive Officer of ESI Group

ESI's performance is a paradox: ESI is a key technology provider operating in a vibrant market and yet

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profit and growth are far below comparable and stakeholder expectations. ESI's management believes that to unleash its potential:

- ESI must focus on its core business to invest to win in key simulation markets;
- ESI must globalize its distribution to serve global customers, including a globally coordinated value packaging & pricing strategy.

The Group spent the past 7 months developing this “OneESI 2024 - Focus to Grow” plan to focus on the core business and globalize operations; in recent months, management spent time explaining to an extended team of key leaders the necessity and the credibility of this plan. ESI is now entering the next phase of communicating more broadly and executing on all facets of this transformation.

Financial ambitions for 2024

To increase its competitiveness, ESI must focus to grow. The Group has already made significant progress in this direction, as communicated during its H1-FY21 results, thanks to its healthy run rate initiative, the group posted both a growth in revenue and an improvement in profitability, and in tandem a sustained reduction in headcount and costs in the past year. The Group expects to continue with this trajectory, estimating a further reduction in headcount of approximately 5% by December 2022 and then a stabilization of headcount. This reorganization will be implemented in the various regions of the Group in accordance with the legal rules applicable to each of them.

Accelerating in this direction, the Group announces its 2024 financial objectives. With its plan “OneESI 2024 – Focus to grow”, ESI aims to reach:

- A high single digit growth
- An adjusted EBIT to exceed 20%

To achieve this plan, ESI counts on its key levers:

- a confirmed opportunity in a growing and vibrant simulation market
- a renewed operating model
- a best-in-class governance
- committed teams

By building off its accelerators, the management ambitions a higher growth beyond this 3-year horizon.

More details

To present its “OneESI 2024 – Focus to grow” plan, ESI is organizing an Investor Conference which will be held on Tuesday, October 5th, 2021 at 3:30pm CET.

Upcoming events

- Q3 revenues – October 28th, 2021
- FY21 sales and results - February 28th, 2022

Invitation to presentation of Addnode Group's Interim Report January – September 2021

7 October 2021

Addnode Group is pleased to invite investors, analysts and media to a presentation where President and CEO Johan Andersson and CFO Lotta Jarleryd will present the interim report January – September 2021. After the presentation, there will be an opportunity to ask questions.

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Date: Friday October 29, 2021

Time: 09:30 am CET

Link to Audiocast: <https://financialhearings.com/event/13565>

The presentation will be held in English.

The report will be published at 08:30 am CET the same day.

The full report, presentation and link to the audiocast will be available on www.addnodegroup.com

Invitation to presentation of Hexagon's Interim Report on 28 October

6 October 2021

Hexagon will release its Interim Report for the third quarter 2021 on Thursday 28 October at approximately 08:00 CET. A combined telephone conference and live webcast concerning the report will be presented by President and CEO Ola Rollén on the same day at 10:00 CET.

Please call +46 (0) 8 566 426 51 (SWE), +44 (0) 333 300 0804 (UK), +1 631 913 1422 (US) (code: 24159039#) to participate in the telephone conference or visit hexagon.com to access the webcast.

The presentation material will also be available for viewing on the Company's website on-demand.

Infosys to Announce Second Quarter Results on October 13, 2021

4 October 2021

Infosys, a global leader in next-generation digital services and consulting, will announce results for the second quarter ended September 30, 2021 on Wednesday, October 13, 2021 around 3:45 p.m. Indian Standard Time (IST) (6:15 a.m. US ET; 3:15 a.m. PST; 11:15 a.m. London time; 6:15 p.m. Singapore/Hong Kong time).

Common press conference

(4:30 p.m. IST; 7:00 a.m. ET)

Following the release, the leadership team will be part of a common press conference at 4:30 p.m. IST. The participating executives will address questions from the media during this interaction, which will be streamed live on the Investor Relations section of Infosys website, following which it will be archived at www.infosys.com. The archive will be available after 7:00 p.m. IST on October 13, 2021 (after 9:30 a.m. US ET on October 13, 2021). In addition, a transcript of the conference will be available at www.infosys.com.

Earnings call

(6:00 p.m. IST; 8:30 a.m. ET)

The company will conduct a single 60-minute conference call at 6:00 p.m. IST (8:30 a.m. US ET; 5:30 a.m. PST; 1:30 p.m. London time; 8:30 p.m. Singapore/Hong Kong time) on October 13, 2021 (open to investors/analysts in all regions), where the senior management will discuss company's performance and answer questions from participants. To participate in the conference call, please dial the numbers provided below 10 – 15 minutes before the scheduled start time of the call. During this time, the operator will provide instructions on how to ask questions. Alternatively, you can also pre-register yourself using the DiamondPass™ link provided below which will enable you to connect to the conference call without having to wait for an operator. As participation in the call is limited, early registration is encouraged.

This event will be webcast live on the Investor Relations section of Infosys website, following which it

will be archived at www.infosys.com. The archive will be available after 8:30 p.m. IST on October 13, 2021 (after 11:00 a.m. US ET on October 13, 2021). In addition, a transcript of the conference call will be available at www.infosys.com.

Implementation Investments

Amsterdam UMC Chooses ERP Platform from Infor and Apex System

8 October 2021

Major hospital deploying Infor CloudSuite Healthcare for financial administration, procurement and logistics

Infor, the industry cloud company, together with system integrator Apex Systems, will deliver an ERP platform to Amsterdam UMC. Infor CloudSuite™ Healthcare is a modern industry-specific cloud solution that is specifically designed for operational processes and integration needs of healthcare organisations. The solution can be used for the financial administration, procurement and logistics of the hospital.

[Amsterdam UMC](#), which consists of the Academic Medical Center and the VU Medical Center, is one of the largest hospitals in Europe. In the hospitals, over 16,000 employees provide care to 350,000 patients per year. Amsterdam UMC is an existing customer of Infor and already uses Infor Cloverleaf for interoperability.

Apex Systems, formerly known as Avaap, is a system integrator specialized in the healthcare sector and is one of the key players in the implementation process. Apex Systems is supported by NextMed and Enovation. The total implementation process will take about two years.

"We are very pleased to be able to deploy our cloud solution together with our partners in one of the most prestigious teaching hospitals in Europe," said Jelle Brouwer, Infor senior account executive for healthcare. "This is an important step in using our expertise to further extend these cloud services to European hospitals. Our ERP solutions and the strong implementation through our partners contribute to efficient processes in the medical centers and lay a strong foundation for building healthcare-specific innovations."

About Infor CloudSuite Healthcare

[Infor CloudSuite™ Healthcare](#) is a platform specifically designed to support the operational processes and integration needs of healthcare organizations. The multi-tenant cloud platform connects the business of healthcare with the mission of healthcare by providing ERP solutions for finance, workforce planning, and the supply chain, among others. With this, the platform works to further optimize and automate healthcare organizations to build healthcare-specific innovations.

ATP and Infosys Launch Revamped Stats Center to Bring Fans Closer to the Game Through Digital Innovation

8 October 2021

[Infosys](#), a global leader in next-generation digital services and consulting, in partnership with the ATP Tour, have launched a suite of exciting match stats and analysis tools designed to bring fans, coaches and media closer to the action of men's professional tennis.

From today, fans will be able to level-up their experience of ATP Tour matches by layering on statistical insights from across more than 60 ATP Tour events each season. Delivered via an immersive and

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intuitive interface on [ATPTour.com](https://www.atptour.com), Infosys, the Digital Innovation partner of the ATP Tour, will allow viewers to tap into the pulse of the match through real-time data and insights – helping to tell a richer story of the action on court and reveal game-changing moments.

Over the last six years, Infosys has helped push the boundaries of the sport further through a suite of innovative solutions. These include popular data-led products such as the ATP Stats Leaderboards and ATP Second Screen for live insights, in addition to digitally driven solutions like the new ATP tour fan app and Player Zone.

The new features launched today have been enabled using the Infosys Tennis Platform which leverages tech such as big data analytics and natural language generation (NLG) to produce match insights in 3D. It is deployed as a serverless platform on public cloud and built focusing on the key architectural principles of micro-services, micro-frontends, automation, scalability, and observability. The new experiences launched today include:

- **MatchBeats:** Look deeper into highs and lows of the match with point-by-point analysis studying shot speeds, rally lengths and auto generated insights. Spot important trends using filters, from every winner to unforced errors.
- **Rally Analysis:** Dissect how rallies happen and which ones create an impact. Identify the patterns of play that matter most and study performance on short, medium, and long rallies.
- **3D CourtVision:** Re-live every point via an immersive 3D court experience that gives fans the best seats in the house. Analyse ball trajectory and key statistics from multiple viewing angles.
- **Stroke Summary:** Gain insight into player performance and success rates across different stroke types such as forehands, backhands, lobs and volleys.
- **Stats:** Rank stats according to their influence on the outcome of a match. Understand if break points won mattered more than net points, or double faults turned the tide more than aces.

Daniele Sano, ATP Chief Business Officer, said: “As an organisation we are constantly looking for new ways to make the experience of our sport more compelling. Tennis is incredibly data-rich, and Infosys has both technological expertise and passion for tennis to bring it to life in an intuitive way. We are excited for fans to interact with these new features and look forward to future digital innovation together with Infosys.”

Sumit Virmani, Chief Marketing Officer, Infosys, said: “The revamped stats center is another significant landmark as we navigate into the 7th year of our successful journey with the ATP. The application of digital technologies is now becoming increasingly important in sports and business. As strategic partners in the digital roadmap and vision for the ATP, we are delighted to jointly bring innovative experiences to the world of tennis to further amplify the experience of fans, coaches, and other stakeholders of the game across the globe.”

Explore the new Infosys ATP Stats for any match by visiting [ATPTour.com](https://www.atptour.com)

Aurigo’s Masterworks 2021 to Modernize Capital Improvement Programs for Multnomah County

5 October 2021

Aurigo Software, the leading provider of capital planning and construction management software for infrastructure and private owners, announced it had entered a multiyear contract with Multnomah County, Oregon to modernize capital program and project management for its facilities and

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transportation divisions.

“We are honored Multnomah has selected Aurigo Masterworks as their new program management solution to help manage the County’s capital investments,” said Balaji Sreenivasan, CEO and founder of Aurigo Software. “It is a pleasure to partner with Multnomah to help them achieve their 5-year capital improvement plan goals. We are excited to support the County on their journey to the cloud, so they can support their growing population today and beyond.”

Though smallest in area at only 465 square miles, Multnomah County is the state’s most populous county with more than 800,000 residents across the cities of Portland, Fairview, Gresham, Maywood Park, Troutdale, and Wood Village. Multnomah County is responsible for six bridges over the Willamette River and the County also maintains approximately 269 miles of roads. Many of these roads are rural, but a few are regional roads in and around Fairview, Troutdale, and Wood Village. The County’s 140 facilities include libraries, health and dental clinics, senior service centers, courthouses, and correctional facilities.

Previously, the County had managed its facilities’ capital investments with a custom Microsoft Access database that had, in the 10 years since its design, become outdated. Capital improvements and assets were also managed using capital planning software that no longer met the County’s needs. In addition, Multnomah’s transportation division used project management software which was approaching end of life.

To solve these critical issues, the County sought a cloud-based Software-as-a-Service (SaaS) solution, with the single-platform, enterprise-level capabilities to automate business workflows and scale across the entire capital program lifecycle to support 150 projects of various sizes. Additionally, they sought a solution that is configurable by the County’s system administrators and integrates seamlessly with existing extensible apps and programs in use such as Workday, Jaggaer, and Oracle Primavera P6.

With funding available to modernize, in May of 2020, the County started their selection via a formal Request for Proposal process that evaluated various vendors and determined Aurigo to be the best qualified to meet the County’s long-term needs for capital planning, construction, and right of way management.

Multnomah joins Aurigo’s growing list of major U.S. counties and cities to adopt the platform, including Denver, Houston, Seattle, and Las Vegas.

Fanalca Selects Infor CloudSuite WMS to Support its Growth Strategy

5 October 2021

Infor, the industry cloud company, announced Fanalca (Fábrica Nacional de Carrocerías) in Colombia has selected Infor CloudSuite™ WMS warehouse management system. The Infor solution implemented in the cloud will help the automotive assembly company achieve its business goals. The solution was sold by Cerca Technology, Infor’s channel partner and strategic partner in the warehouse management sector.

Fanalca, a leading company in the automotive sector, was looking for a software solution to increase efficiency, guarantee quality of services, optimize resources, process information in real time, improve decision-making, reduce process times, and improve customer satisfaction.

“Infor WMS was selected jointly with Cerca Technology, a leading IT implementation organization. Infor WMS will be implemented to improve operations in our distribution center where Honda spare parts are handled in Colombia. This initiative is part of the “Link Program,” which has the goals to

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improve user experience and increase service quality for our customers,” states German Guzman, Honda operations director at Fanalca.

The project

- “Link” is the name of the digital transformation program Fanalca has set up, with several aspects including analytics, distribution center management, inventory control, demand planning, and customer relationship management (CRM).
- Main challenges: detailed tracking of all movements in the distribution center, less decision-making by operative staff, centralized management of all resources and activities in the distribution center, guarantee access to accurate data to make decisions and centralize operations.
- Fanalca has a customer network that demands services and spare parts, and 30,000 units are delivered daily (spare parts, batteries, and oil products) through its logistic services.
- Project will be implemented in the distribution center at Yumbo, Cauca Valley, and will be integrated with the existing vertical warehouse management solution.
- Two key reasons for selecting Infor CloudSuite™ WMS were to have a robust solution that grows jointly with the operation, and because of the deep know-how of the implementation team.

“Fanalca is leading a very important digital transformation process, and we are proud to be part of this project by implementing Infor WMS to manage processes in the spare parts distribution center. With this implementation, Fanalca will have an enhanced logistics development level and will be able to capitalize all commercial opportunities that impact service,” states Paola Quiroga, Cerca Technology sales manager.

“Logistics in modern distribution centers are complex operations that go far beyond simple storage and transportation. This means automated workflows and accurate tracking of individual activities on any given account are vital. This drives immediate return on investment as well as positioning companies such as Fanalca for growth,” states Adriana Gutierrez, Infor Latam channel director.

FunSunYoung Implements Centric PLM to Boost Innovation

4 October 2021

FunSunYoung, the packaging company, has selected Centric Software’s Product Lifecycle Management (PLM) solution. Centric Software provides the most innovative enterprise solutions to plan, design, develop, source and sell products such as apparel, footwear, sporting goods, furniture, home décor, cosmetics, food & beverage and luxury to achieve strategic and operational digital transformation goals.

Founded in 2008 in Hangzhou, FunSunYoung consistently upgrades and innovates packaging solutions with creative packaging planning, design, production, and sales. FunSunYoung is the owner of more than 300 original design patents and partner of over 200,000 businesses and more than 500 brands, including Huawei, Alibaba and Ping An.

With constant brand expansion as well as market reshuffling, FunSunYoung faces the challenges of brand management and continuous product innovation. FunSunYoung decided to implement Centric PLM, based on Centric’s flexible solution and deep expertise in business optimization.

“We hope to improve our business efficiency in storing, recalling, and collaborating with design files through the use of Centric PLM,” says Mr. Wu, General Manager of FunSunYoung. “The advanced concept of Centric will change our working habits and improve the way we think, thus driving quality enhancement and the further advancement of FunSunYoung.”

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The project will significantly streamline FunSunYoung's product development, teamwork and corporate management. Expected benefits include improved data management, workflows, project tracking and risk control, extensive collaboration between teams and future suppliers, the ability to capture inspiration to drive creative product development and better rational decision-making based on accurate data.

Working with FunSunYoung, Centric will systematically consider its corporate strategy, business model, operational characteristics, management system and system support in order to create suitable lightweight digital solutions.

"I look forward to a mutually fruitful and close cooperative relationship," concludes Mr. Wu. "It is also my wish that FunSunYoung will open the doors for Centric to a new industry."

"We are very excited to announce our first partnership with a company in the packaging space," says Chris Groves, President and CEO of Centric Software. "Centric PLM is an extremely flexible solution, and FunSunYoung recognizes its unique capabilities to drive efficiency and innovation across their business. We look forward to working together to build a foundation for future success."

Momentum Builds for IFS As Major Companies Opt For IFS Cloud

8 October 2021

- Companies across key industries from Manufacturing and Service, to Engineering Construction & Infrastructure, and Energy Utility & Resources are choosing to upgrade to IFS
- Leading companies, GED Integrated Solutions and Monarch Landscape Companies, explain how IFS Cloud provides new opportunities from building data lakes to integration through open APIs

[IFS](#), the global cloud enterprise applications company, has announced strong momentum of major North American companies deciding to upgrade to [IFS Cloud™](#) since the solution was launched in March 2021. IFS has seen a fast adoption rate of IFS Cloud across all its core industries. Two standout companies that are upgrading to IFS Cloud are [GED Integrated Solutions Inc](#) and [Monarch Landscape Companies](#). The two companies, who have been utilizing a previous version of IFS's enterprise software, explain the expanded business benefits that upgrading to IFS Cloud will bring to their businesses.

GED is a leader in the North American window and door manufacturing sector, pioneering the use of robotics, automation, and software technology in the manufacturing of windows, doors, and insulated glass. GED, whose advanced insulated glass, software, and vinyl fabrication equipment is used by 22 of the top 25 window and door manufacturers was previously using IFS Applications version 9. Now, with the company's recent decision to upgrade to IFS Cloud, the ability to use the open API functionality to integrate applications, including GED's own [software process solution](#), the company will experience all the benefits of IFS in one seamless solution. Upgrading to IFS Cloud will further cut GED's time to value and help the company even better organize its field service technicians and support staff across every department.

"It was a lot easier to justify going to IFS Cloud knowing that it's evergreen and therefore no more recurring full upgrades," explained Brett Erway, IT Manager at GED Integrated Solutions. "Using the software's open API functionality will be big for GED and will help us stay current in our service agreements. Our employees can customize their own dashboards and workflows to access crucial data on any device, such as the status of their machine or parts order, allowing us to translate these efficiencies into delivering better services to our customers. Getting everyone to use the same data will

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be a game changer and we are excited to see how this will develop.”

Monarch delivers its services to commercial property owners and managers, general contractors, homeowners associations, and municipal customers up and down the West Coast, Colorado, and Texas. It is a strong advocate for making sustainability and water management part of its landscaping services. The company wanted to further push its efficiency in capturing and analyzing data to drive decisions, hence the choice to upgrade. The security offered by IFS Cloud means end users can input and access information in a new Monarch data lake, thereby giving the company opportunities to pair the IFS solution with artificial intelligence (AI) and machine learning (ML).

Steve Pomush, Director of IT at Monarch, commented, “We want to drive tomorrow’s decision using historical data. IFS Cloud will provide a direct feed into the data lake we’re building out. Long term, the data will feed analytics, which can help us understand key market trends from overtime developments to the long-term price of fertilizer. This will influence our timely reporting and ancillary quoting, which will help us make faster and more effective decisions that directly improve our workflows and customer experience

Cindy Jaudon, Regional President of Americas explains the growing momentum for IFS Cloud, “Our customers can see that IFS Cloud will reshape their service experience - by helping bring a better moment of service to the consumers they serve. Built on 100 percent open APIs, IFS Cloud will provide GED with the configurability they require and empower Monarch to make business decisions even more efficiently. These are just two examples of how IFS Cloud delivers the full spectrum of IFS capabilities in a single product with solutions tailored to specific industries and businesses.”

Norway’s Largest Power Distributor Selects IFS Cloud

7 October 2021

IFS, the global cloud enterprise applications company, announces that Elvia, the largest electricity distribution company in Norway, has decided to implement IFS Cloud™ to support its mission-critical enterprise resource planning (ERP) processes.

The result of a merger between Eidsiva and long-standing IFS customer Hafslund, Elvia is responsible of delivering power to more than one third of all households in Norway.

To meet the rapidly growing demand for renewable energy among its private and public customers, the company engaged IFS to define a enterprise software solution that could support all current needs while ensuring easy integration and extensibility to power future innovation projects.

IFS Cloud will be used by 1,800+ Elvia staff and Elvia subcontractors to ensure a uniform way of working across all parts of the business. The solution will form the backbone of an entirely new way of managing core processes such as finance, procurement, as well as contractor and project management. IFS Cloud and its uniquely open API architecture will also be used to modernize and streamline Elvia’s asset maintenance processes while providing the basis for intelligent power grid management through the use of sensor data, geodata, and grid data.

“We are witnessing a major shift in the energy sector, where public and private customers place ever-increasingly stringent demands on the generation, provenance, and distribution of the electricity they use,” Elvia IT Director Jon Andreas Pretorius said. “This means that we needed to revise and remodel our processes to offer the services people expect from a modern, customer-centric utility company. The IFS solution will help us realize this transformation and gives us an open and easily extensible platform for continuous innovation.”

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Glenn Arnesen, President, IFS Northern and Central Europe, added, “Elvia is a change- and innovation-driven company and we are proud to have been selected as its technology partner. IFS Cloud was designed to offer enterprises with complex business an uncomplicated way to become data-driven, improve decision-making, and, ultimately, deliver better moments of services to their customers. We look forward to continuing our successful collaboration with Elvia as we implement a future-proof solution for sustainable and efficient power distribution.”

Rho Selects Medidata’s Industry-Leading Decentralized Clinical Trial Capabilities for Patient-Focused Approach to New Drug Development

5 October 2021

Medidata, a Dassault Systèmes company, announced that **Rho**, a full-service contract research organization (CRO) with a proven track record of drug development success, is using Medidata to standardize its clinical trial platform for building out its decentralized clinical trial (DCT) technology offerings. This will enable Rho to provide rapid reporting of cross-domain, cross-study data in decentralized trials, where data collection methods have become more numerous, varied, and complex.

“Forward-thinking CROs, such as Rho, are rapidly making the necessary platform and accreditation investments to enable sponsors to move into a hybrid and/or fully decentralized approach to managing clinical trials,” said Joan Shaiman, senior vice president, partners at Medidata. “Rho has been a valued partner with Medidata for over ten years and provides its clients with deep clinical trial management expertise in neurology, respiratory, rare diseases and orphan drugs.”

Rho made the strategic decision to invest in Medidata’s single platform to provide flexible and agile support for future business growth. This clinical technology capability and expertise will advance efforts to accelerate sponsors’ clinical development programs by giving them complete access to their clinical and operational data and enhancing its utilization to inform decision-making.

“By partnering with Medidata – a trusted leader in this space – we are further committing to sponsors that we can meet and exceed their future needs, especially as the market evolves from traditional clinical trials toward a more decentralized and patient-focused approach,” said Dr. Laura Helms Reece, CEO, Rho. “This investment will give us an important competitive advantage as we strive to be ahead of the curve, as the industry continues to evolve in response to advancing technologies and the need for greater diversity and inclusion in clinical trials. A key element will be streamlined, real-time visibility into patient data and quality metrics throughout a decentralized trial, from inception to study conclusion.”

Medidata’s end-to-end platform helps its clients attract and win more sponsor bids, while reducing study build time, saving money on unexpected data migrations and transfers, and speeding up data reconciliation and cleanup.

Medidata is a wholly owned subsidiary of Dassault Systèmes, which with its 3DEXPERIENCE platform is positioned to lead the digital transformation of life sciences in the age of personalized medicine with the first end-to-end scientific and business platform, from research to commercialization.

TOP RANKED INFRASTRUCTURE AND ENVIRONMENTAL FIRM ATLAS TECHNICAL CONSULTANTS SELECTS DELTEK TO POWER ITS GROWTH

5 October 2021

Deltek, the leading global provider of software and solutions for project-based businesses, announced that Atlas Technical Consultants (“Atlas”) has chosen Deltek Vantagepoint as its ERP solution. Deltek

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will support Atlas with its mission to be the nation's most sought-after infrastructure and environmental solutions company. In 2021, Atlas was ranked #9 in Environmental Management, #15 in Construction Management and #47 in Program Management on Engineering News-Record (ENR) Top 100 list.

Headquartered in Austin, Texas, Atlas provides professional testing, inspection, engineering, environmental and consulting services, with more than 100 locations and approximately 3,600 employees nationwide. Atlas' core purpose is to apply their values and expertise to improve sustainable infrastructure and ensure a safe environment.

To continue its rapid growth and reduce the burden on its staff, Atlas made the decision to consolidate all of its acquired companies into a single ERP platform. Atlas required a fully-integrated ERP solution that could scale with its rapid growth, requiring minimal customizations, and offering ease of implementation and risk mitigation. After a thorough vetting of competitive solutions, Atlas chose one ERP platform and that was Deltek Vantagepoint in the cloud.

Purpose-built for firms like Atlas, Deltek Vantagepoint helps companies like Atlas know more about their entire workforce to help them better plan, budget, forecast and account for all resources in a single integrated system.

"It's an exciting time at Atlas as we rapidly grow our business, and expand our talented workforce, capabilities, and geographic reach. Deltek was the best fit for us as we continue to scale, increase operating efficiency and drive results for our shareholders," said David Quinn, CFO at Atlas.

"We are excited to welcome Atlas to Deltek Project Nation! We look forward to helping Atlas as they continue their rapid growth and delivering sustainable and innovative infrastructure projects for their clients," said Natasha Engan, Senior VP, Global Sales at Deltek.

Woolworths Reduces Admin by 15-20% Thanks to Centric PLM

8 October 2021

Iconic multicategory retailer celebrates 'beacon' PLM implementation, boosting collaboration, visibility and costing efficiencies

Centric Software is delighted to announce the release of a success story about its customer, Woolworths.

Woolworths offers a unique blend of food, fashion, beauty, homeware and financial services. The first Woolworths store opened its doors to the public in Cape Town in October 1931 and Woolworths prides itself on being a values-driven organization that strives to go to market first with what matters. With a team of over 31,000 people in South Africa, over 43,000 people across the Group in the Southern Hemisphere, and a comprehensive product mix, it is an understatement to say their business model is complex.

Prior to PLM, there were too many complexities in the way products would be attributed, coded and managed at Woolworths. Their large supplier base added additional layers of complexity and quality management was not standardized.

On top of this, the business was working in an outdated legacy Product Data Management (PDM) system, resulting in an overreliance on email and Excel, duplication of work and a lack of traceability and standardized business processes. Woolworths needed a digital transformation solution to streamline operations, modernize processes and stay competitive in the challenging retail landscape.

"The question of finding the right PLM is what took a bit of time... we had to make sure that we could find the right system to be able to cater to all of the complexities and nuances across our product mix," shares Moira Alexander, Manager of Improvement Projects at Woolworths. "We're a big ship, we don't

turn very quickly.”

Woolworths selected Centric PLM for a variety of reasons including Centric Software’s expertise in fashion and retail, impressive customer endorsements and high satisfaction rates as well as the opportunity for truly localized project support.

“From the beginning, we didn’t just put in a PLM system, we re-examined how we worked and identified gaps and opportunities, trying to understand how we could make the systems and the processes work better,” says Alexander.

Woolworths has realized significant ROI since the rollout in terms of time saved, communication and collaboration, removing duplication of work, cost-efficiencies and increased visibility. The project was delivered *on-time, under budget* and with a *larger scope* that originally estimated.

Discover how PLM delivered transformational change at this iconic multi-category retailer by reading the full Woolworths Success Story! [*Read the full story*](#)

Product News

A smart way to move on-premise VMware workloads to Azure

8 October 2021

T-Systems can help migrate VMware workloads with the latest solution of managed cloud services for Azure, Azure VMware Solution. Azure VMWare Solution enables customers with large number of on-premise VMware workloads (Linux Server and Windows Server) to modernize these workloads and maximize the possibilities of scalability on a global Azure infrastructure. “T-Systems is passionate about helping customers succeed in their journey to Azure. Hosted Azure VMware Solution from Microsoft and managed VMware workloads are the cornerstone for a frictionless application transformation to Microsoft Azure,” said Frank Strecker, SVP Public Cloud Managed Services, T-Systems.

Significance of T-Systems-powered Azure VMware Solution

"Microsoft Azure VMware Solution allows you to easily move your on-premise VMware environment to our public cloud and modernize your applications. With the managed services of our partner, T-Systems, your IT will be more secure and agile to respond to future business challenges," affirmed Thorsten Herrmann, General Manager Enterprise Commercial, Microsoft GmbH.

Azure VMware Solution is an Azure service from Microsoft, bringing VMware-based environments to Azure without major changes. Microsoft provides the management systems, network services, operating platform, and back-end infrastructure necessary to run native VMware environments at scale on Azure. For customers looking for a partner with deep migration expertise, management, and operational competence in public cloud environments, T-Systems is one of the leading players.

For the implementation of the Azure VMware Solution, two critical forces come together - VMware experts on the customer side and T-Systems experts with their proficiency in migration, management, and operation of the Azure cloud environment. In addition to the Azure toolset, T-Systems’ Managed Cloud Services on Azure, and Azure VMware Solution offer services such as access, integration, billing, update and backup management, SLA monitoring, and price advantages that the Magenta brand receives for being a certified Microsoft Gold Partner with the SAP on Azure Advanced Specialization.

Allplan 2022: Optimal buildability through seamlessly integrated processes

7 October 2021

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ALLPLAN, global provider of BIM solutions for the AEC industry, announced the global rollout of its new BIM software version. Allplan 2022 provides an integrated working method for architects, engineers, and contractors on a single platform, from the initial design to the successful implementation on the construction site. The new version supports the thorough capture of the construction environment, with functionalities for terrain modeling and road design. In addition, it offers further product quality improvements for modeling, detailing, data management, reliable construction planning, as well as an optimized user experience that will help shorten coordination processes and increase design efficiency.

“Enabling our customers to optimize their projects for efficiency from inception to construction is the focus of our ‘Design to Build’ corporate strategy and at the heart of Allplan 2022,” says ALLPLAN CEO Dr. Detlef Schneider. *“This includes considering buildability, pre-fabrication, and construction site challenges at an early stage of the design process to make better decisions, improve sustainability and safety, and reduce waste.”*

This is also confirmed by customers such as from the Swiss engineering firm Emch+Berger: *“The development and optimization of a project from the initial design to successful implementation on the construction site is a multi-layered task in which a multitude of information and requirements must be taken into account and brought together. In our view, consistent planning that is independent of phases and trades is a key to project success. With Allplan, we have a software solution that supports our philosophy of this holistic and integral approach,”* says Sigrist, civil engineer at Emch+Berger.

Kevin Lea, Senior Vice President Product Management at ALLPLAN: *“At Allplan, providing tools to help create models from concept through to detailed design is a core focus. We are constantly investigating ways to improve our modeling capabilities, and this year we are pleased to provide several enhancements as well as new functions for quantity take-off, terrain modeling, and road design.”*

New in Allplan 2022

A large part of the new features and improvements is due to feedback from our customers. They also attest to the high efficiency of the new version. *“Since the first test version of Allplan 2022, I have handled all projects with it. Through almost daily collaboration with the ALLPLAN development team, the version has been constantly improved. I am already looking forward to my colleagues being able to use the new functions of the BIM software, making collaboration even more efficient and flexible,”* comments Reinhard Roscher, Managing Director of CAD-Forge GmbH from Graz.

Enhanced modeling capabilities

Detailed and precise models are a key prerequisite for efficient processing of BIM projects. With Allplan 2022, the interaction of components has been fundamentally revised. Intersection within a drawing file is now controlled consistently via priorities. Manual rework is in many cases no longer necessary. The resulting increased model quality reduces the effort required to create working drawings and detailed drawings. Collisions are avoided and quantities can be determined even more reliably.

The functionality for terrain modeling and road design has been completely redeveloped and includes an intuitive user interface to get started quicker. In addition, the import of point lists, LandXML, and REB files – as well as the transfer of road alignments– is supported. To further optimize performance, relevant areas can be cut out of a terrain model.

Enhanced steel detailing and construction

The automated reinforcement for beams, columns, walls, and punching shear reinforcement introduced already earlier has been upgraded. For example, the underlying PythonParts are retained and can be

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adjusted parametrically. Reinforcement can be copied complete with sections and labels, saving time when dealing with many similar reinforcement situations.

Bolted and welded steel components have been newly developed for Allplan 2022. The steel construction connections are based on standard elements – such as plates, cleats, bolts, and welds, which are available in the new connection toolbox – but can also be combined into connections using Python scripts.

Comprehensive data management

The openBIM platform Bimplus offers a variety of improvements that, for example, speed up the loading of large models, simplify measurement, and optimize document management. In addition, documents and links can now be attached in the Issue and Slideshow Manager and properties in the Issue Manager can be customized. Finally, exporting selected objects in IFC format is now possible.

Due to its central importance for BIM projects, attribute management with Allplan and Bimplus is constantly being further developed. For example, the performance of the interaction between Allplan and Bimplus has been improved. The formula editor for attributes now supports the Python programming language as well as a syntax check for detecting incorrect formulas.

Improved user-experience

Numerous workflow and user-friendly improvements ensure efficient design processes with Allplan 2022. To make it easier to get started with Allplan, the tooltips have been enhanced: when you hover over an icon with the mouse button, a brief explanation of the function is now automatically displayed.

For example, a number of optimizations in the Visual Scripting area make creating custom scripts even easier and faster. The new palette designer allows parameters to be placed selectively on multiple tabs.

Numerous optimizations have been made for work across locations with the collaboration tool Allplan Share. For example, data is uploaded in the background without waiting times.

New tools for reliable planning

BIM and digitalization are not limited to the design process, but also play an increasingly important role in construction. Accordingly, the construction process is being given greater consideration during design and prefabrication. Allplan 2022 supports this trend, with new objects developed specifically for construction site management, such as cranes and concrete pumps.

In addition, quantity calculation has been enhanced. With the latest Allplan version, even items that have not been modeled (e.g. formwork) can be quantified, providing reliable cost planning.

The visualization capabilities have been extended in the new version, which take advantage of the capabilities of modern graphics cards for better performance and convincing visualizations. New effects are available for this purpose, including volumetric fog, bloom, and lens flare.

Availability

Allplan 2022 as well as the free 30-day trial version are now available for download. With the new Windows Installer, you can now get started even faster. The user guidance has also been redesigned and simplified. If you have a large number of workstations, you can save all settings and then run the installation completely automatically.

Altair Fuels Better Decision Making and Faster Optimization with Latest Release of Integrated Simulation and Analysis Portfolio

5 October 2021

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Altair, the global leader converging simulation, HPC, and AI, announced significant enhancements to its integrated portfolio of simulation and design tools. This update to Altair's simulation software suite is focused on accelerating simulation-driven design and unleashing the power of AI by embedding augmented intelligence in the broadest possible range of computer-aided engineering (CAE) tools.

“The latest release of our simulation solutions embodies Altair's position at the sweet spot converging simulation, HPC, and AI. For engineers, designers, and simulation specialists, this release fosters exploration, innovation, and collaboration,” said James R. Scapa, founder and chief executive officer, Altair.

Enhancing simulation-driven design

Simulation 2021.2 takes simulation-driven design to the next level. Simplified modeling workflows offer even faster design iterations, resulting in optimal, manufacturable designs earlier than ever in the development cycle. Enhancements include:

- *Parametric feature-based modeling and simulation workflow* – Altair® Inspire™ makes geometry modeling and editing accessible to all designers and engineers, even if they do not have time or access to traditional computer-aided design (CAD) tools. A robust history-based CAD modeling approach ensures creation and modification of geometry is quick and easy.
- *Ability to perform what-if studies faster and more easily* – Altair's high-end solvers powering Inspire encourage wider collaboration and extend to flexible bodies for motion analysis and even faster integration with Altair® SimSolid®, facilitating rapid analysis of large assemblies.
- *A comprehensive Python-based API* – More than 500 documented, running examples enable fast automation and customization of simulation-driven design and manufacturability workflows.

The right model, for the right decision, at the right time

Simulation 2021.2 combines computationally efficient reduced order models and detailed CAE analysis with process automation of labor-intensive tasks. Users can now build mixed fidelity models with the appropriate complexity to help faster decision making. A major development includes Altair® Pulse™, a new tool that orchestrates meaningful models from the broad workflows required to simulate complex systems of systems to the focused workflows needed to enable fast, reliable, and repeatable modeling, analysis, and optimization. Across the entire product development lifecycle, Pulse accelerates decision-making, and inspires greater confidence in the process. Key features and capabilities include:

- A digital thread that drives script consolidation, process commonization, and data traceability for simulation key performance indicators (KPIs) across the enterprise and throughout the product lifecycle.
- Digitizing best practices to increase team efficiency and analysis consistency, while reducing procedural errors and non-value-added time. More effort can be invested in using simulation to inform performance targets, evaluate attribute trade-offs, and explore what-if scenarios.
- Boosting efficiency by using multiple scripting languages to eliminate repetitive tasks across applications, even for complex processes.

Bringing augmented intelligence to a broad range of CAE tools

AI-driven design, augmented intelligence, and predictive analytics all contribute to broader collaboration, faster design convergence, and greater product innovation. Machine learning (ML) algorithms in this solution suite are leveraged in three main areas:

- *Augmenting existing products with AI* – Beginning with the modeling and visualization products,

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the latest release of Altair® HyperWorks® includes features like shapeAI, which applies ML to quickly find and classify parts by shape inside geometry files or finite element meshes.

- *Adding AI power to product design* – Altair HyperWorks’ Design Explorer enables easy set-up and execution of design of experiments (DOE) and optimization studies and deploys ML models to provide real-time field predictions for any design change.
- *Leveraging field data across the entire product lifecycle* – With new tools like signalAI, ML can interpret field data to prevent product failures when the data shows health deterioration and predict the effects of environmental changes in real time.

“Leveraging new capabilities enriched by AI, we are liberating users from tedious and repetitive tasks, and enabling them to run more what-ifs and design iterations,” said Scapa. “By supporting better decision making at the earliest possible opportunity, Altair is once again accelerating and optimizing design and manufacturing outcomes.”

All products are available through Altair Units, which gives customers easy and cost-efficient access to Altair’s entire portfolio of software solutions.

Ansys and Apple Develop the First Cloud-based RF Safety Testing Simulation Solution for MagSafe module MFi Developers

6 October 2021

Apple collaborated with Ansys to launch the first-of-its-kind RF safety testing simulation solution for Apple’s MagSafe module technology developers. The novel technology eliminates the need for physical prototypes and expensive RF safety certification software —reducing costs while simultaneously accelerating the certification process for developers.

MagSafe chargers use magnets in newer iPhone models to connect to accessories that also have magnets built inside, including chargers, cases and docks. Apple’s MFi Program offers developers the technical specifications and resources for creating MagSafe accessories that communicate with Apple devices using MFi technologies and components. Ansys’ extensive simulation expertise is now available to MagSafe module partners in the MFi Program, helping to ensure developers can design and market safe and reliable products more quickly.

Empowering developers with streamlined certification processes is critical to expanding Apple offerings and accessories available to Apple consumers. Ansys provides extensive simulation expertise and the most proven and trusted RF simulation in the world. The push-button functionality enables a simple and intuitive developer experience and greatly reduces cost and time to market.

“This is a scalable, cloud-based solution that leverages Ansys’ gold-standard HFSS electromagnetic solver to support developers with streamlined certification for SAR, peak average e-field and magnetic field distribution,” said Shane Emswiler, senior vice president of products at Ansys. “The solution uses a simple, intuitive interface and automation to reduce complexity and speed results, delivering detailed feedback at every step of the process and standards-conforming, SAR certified data reports for FCC and ICN submissions.”

Ansys and Autodesk to Deliver Fusion 360 PCB Extension

5 October 2021

Ansys and Autodesk are collaborating on a Printed Circuit Board (PCB) extension, marking Autodesk Fusion 360’s first third-party extension. The extension aligns with the companies’ shared vision to

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increase consumer product designers' and engineers' access to electromagnetic analysis.

Ansys and Autodesk are developing the Fusion 360 PCB extension to enable rapid design exploration, which will help reduce costly prototyping later in the product development process. By embedding Ansys' market-leading electromagnetic capabilities within Fusion 360, the integration will provide Electrical CAD users with the ability to perform near real-time PCB analyses within the Fusion 360 workflow.

"We've built the Fusion 360 platform to include comprehensive ECAD & MCAD capabilities and manufacturing workflows in a single environment," said Scott Reese, executive vice president of product development and manufacturing solutions at Autodesk. "This gives designers and engineers the ability to develop products much more efficiently from concept through to fabrication. Integrating industry-leading Ansys simulation into Fusion 360's core PCB design capabilities will help manufacturers get their products to market faster."

"This extension builds upon our existing relationship with Autodesk and introduces electromagnetic simulation to a wider range of designers and engineers," said Shane Emswiler, senior vice president of products at Ansys. "The extension enables users to validate and iterate designs sooner and more quickly with advanced simulation."

The embedded integration builds on Fusion 360's recent release of Ansys Electronics Database (EDB) export capability, which enables users to easily export Ansys files and the ability to launch Ansys Electronics Desktop. The collaboration is consistent with prior partnership workflows aimed at breaking down the silos between designers and analysts. Product designers and engineers will use the Fusion 360 PCB extension to design PCBs faster with electromagnetic compatibility (EMC) compliance, and specialist signal integrity/electromagnetic interference (SI/EMI) analysts will continue to use Ansys Electronics Desktop for detailed simulation and reporting of a product's electromagnetic performance.

Atos announces world-first carbon neutral detection and response cybersecurity services

5 October 2021

As part of its global "Cyber Day", Atos announces that its Managed Detection and Response (MDR) service, a cloud-native cybersecurity offering that offers next-generation threat defense to organizations, ***is now 100% carbon neutral***, making this a major step in Atos' Digital Security NetZero journey.

Atos cloud-based MDR Service already benefits from an ecodesign and ecoarchitecture that is low carbon by design. Today Atos is taking its commitment ***a step further*** by ensuring that it is 100% carbon neutral across the entire carbon footprint lifecycle: supply chain, transportation, operations, end of life.

By completing the decarbonization of one of its key cybersecurity offerings, Atos once again sets the highest standard for the industry. In line with its solid strategic ambition to accelerate the fight against climate change, the Group strives to decrease the carbon footprint of all its solutions – ***and cybersecurity is no exception***.

More specifically, this represents an exciting first step towards the ambition of having a ***100% carbon neutral, comprehensive cybersecurity portfolio***. Over the coming months and few years, Atos will continue to reduce the energy footprint of its cybersecurity services and products and provide increasingly "green" solutions so that the fight against cyber threats runs hand-in-hand with protecting the planet.

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"Climate change and cybersecurity are both significant challenges we face today. Atos is dedicated to making the digital world a safer place, and for us, this also means preserving our planet. So, while we fight the many cyber threats to our digital world, it is crucial to keep an eye on the impact it has on our natural resources. For this reason, and in line with Atos' raising decarbonization ambition, starting last month, we have offset the emissions generated by the Atos MDR service. Our Digital Security teams have also begun to optimize the ecodesign of our cybersecurity products to reduce the footprint of their emissions, and several of our other cybersecurity services will follow suit. This is a first step, and we are proud to have taken it!" said **Zeina Zakhour, Atos Digital Security CTO**.

Atos MDR offers multi-vector threat detection, auto threat containment, and full-service response to uncover complex, covert attack behavior and contain threats in real-time, while incident responders validate and remediate the threats. It combines the power of Artificial Intelligence, big data analytics, and Edge computing. Atos' **15 next-generation SOC**s strategically placed across the globe offer clients a bespoke MDR service to protect from cyber threats on public, hybrid and multi-cloud, and on-premise environments.

This approach is supported by a worldwide network of **6,000 security experts** with deep industry-vertical expertise to offer a unique end-to-end cybersecurity journey to national and global clients across all sectors.

Atos provides customers' data sovereignty with new version of its Detection and Response cyber service

5 October 2021

As part of its global "Cyber Day," Atos launches a **sovereign data version** of its Managed Detection and Response (MDR) cybersecurity service powered by **Atos BullSequana S servers**. This new offering conforms to **data sovereignty principles by country**, and to organizations' particular data and operational needs. This illustrates the fact that Atos strives to protect its customers' data with cybersecurity solutions tailored to their industry, to legal environment, or to territorial challenges.

Atos' MDR service brings advanced threat defense to organizations by proactively hunting, validating, containing, and responding to current threats. It is built on the AIsaac platform, a powerhouse of Artificial Intelligence (AI), big data analytics, and Edge computing for threat detection and response.

The new 'sovereign data' version provides all these features plus ensures that client data remains in a same geography, **ensuring physical and operational sovereignty**. It brings together the advanced security analytics capabilities of Atos' MDR service with the exceptional computing power of **Atos' industry leading BullSequana S** high density computing servers. By combining CPU and GPU processing power, BullSequana S servers provide performance and scalability to address AI-enabled business practices at both enterprise and department level.

For clients who prefer the service to be delivered from the cloud, Atos, with its worldwide network, can set up a cloud in multiple countries to **accommodate different regulations**, whether in the European Union, the United States, Asia-Pacific or the Middle East and Africa. This helps clients keep the data within the country. Atos uses Microsoft Azure Gov Cloud for US customers, Microsoft Azure EU cloud instances for Europe, and can deploy its cloud-native MDR on local clouds to meet data sovereignty requirements across the globe.

"Client needs have been central to our innovation at Atos. Data sovereignty has been a concern for MDR clients from several industries and we have always strived to address those concerns in our cloud-native MDR service models. With the official launch of the sovereign data MDR on BullSequana S

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servers, this feature becomes accessible to a set of clients that cannot move their sensitive data to the public cloud. We believe that considering customers' local and industry specificities is key to bringing them solutions that address tomorrow's needs. With this launch, we hope to address the stricter data sovereignty regulations that are coming across the globe," said **Zeina Zakhour, Atos Digital Security CTO**.

With a worldwide network of **6,000 security experts** and **15 SOC's** operating 24/7 to provide cybersecurity services to national and global clients across all sectors, Atos offers a unique end-to-end cybersecurity journey.

Bal Seal Engineering introduces 3D CAD configurator by CADENAS

5 October 2021

Seal manufacturer launches all-new 3D configurator and library to streamline custom sealing

Bal Seal Engineering, US manufacturer of custom seals, springs, and contacts, has launched Seal Starter 3D™, powered by CADENAS. Seal Starter 3D is an online, mobile-friendly product configurator that streamlines the custom engineering process and helps designers discover solutions faster. “With Seal Starter 3D, our goal was to make it easier for people to experience longer service life, more reliable operation, and the many other benefits of custom sealing,” says Bal Seal Engineering’s Marketing Director, Mark Halloran. “To do that, we combined the convenience of a DIY interface with the experience and support of an engineering team.”

Intelligent configurator functions help select the right seal within minutes

Seal Starter 3D contains a selection of popular Bal Seal® spring-energized seals for rotary, reciprocating, and static service. In its virtual CAD environment, users can choose a seal series in U.S. Imperial or metric dimensions and begin customizing it within seconds to meet specific requirements for size, temperature and media resistance, pressure, and speed.

Based on hardware-related input, Seal Starter 3D’s built-in logic offers seal jacket material recommendations that include PTFE, UHMWPE, PEEK, and other premium polymers. A visual toolbox enables users to change viewing angles, rotate a seal concept 360 degrees, and even examine its geometry in cross-section.

Hybrid approach: Convenience of 3D CAD configurator combined with expertise of engineering team

“We built Seal Starter 3D for the busy engineer who wants to pre-qualify a sealing solution before engaging in deeper conversations, trading emails, or making phone calls,” says Halloran. “Once a user downloads the interactive .pdf containing their seal model and summary, they’re connected with an experienced application engineer who can help them fine-tune it for the best possible result.”

Halloran explains that this “hybrid approach” simplifies the customization process, enabling equipment designers to quickly solve sealing challenges and achieve performance breakthroughs.

BIMcollab ZOOM – 3Dconnexion integration ensures easy, quick and efficient model validation

7 October 2021

BIMcollab and 3Dconnexion have announced a brand-new integration partnership, enabling BIMcollab ZOOM users to work with models using the acclaimed SpaceMouse. BIM professionals working with ZOOM can now experience a faster, more efficient operation due to quick commands, controlled movement acceleration and various navigation modes.

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Hotkeys and efficient workflows

3Dconnexion's SpaceMouse strives to improve ergonomics and efficiency at the CAD workplace. The 3D purpose-built and specialized product delivers intuitive, effortless, and high precision 3D navigation. BIMcollab ZOOM on the other hand, is gaining fast and widespread acknowledgement for the quality, performance and easy to use IFC validation and data extraction tool. By integrating the SpaceMouse with BIMcollab ZOOM, users can use hotkeys for functions such as 'creating an issue' and 'run a clash detection'. This not only saves a lot of time, but creates better workflows as well.

"A high number of ZOOM users requested an integration with the SpaceMouse, so it became a priority to collaborate with 3Dconnexion. As a result, we can proudly say we are now certified by 3Dconnexion. We hope this integration contributes to even faster and smoother experience with our product."

Gerben Bouthoorn, Product Owner BIMcollab ZOOM

Multiple navigation modes

With the SpaceMouse products, users have various navigation modes at their disposal, which can be selected depending on the object, workflow and requirement by using the settings in the driver interface. BIMcollab ZOOM users can walk through a model in *camera mode*, intuitively rotate, zoom and tilt the model in *object mode* and move around a fixed point using the *target camera mode*.

Christian Del Taglia, Senior Project Leader at the Swiss company Helbling Beratung + Bauplanung AG, tested the integration: *"With the 3D mouse it's easy to zoom, pan and rotate the model in all directions when working in BIMcollab ZOOM. You can control and tune the movement acceleration, so that you move from one part of the model to another part very quickly. I already started working with the 3D mouse in my company, and will encourage other BIM professionals in Switzerland to do so as well."*

This enhanced experience is not limited to the SpaceMouse. The whole 3Dconnexion product line is fully integrated with BIMcollab ZOOM, providing additional CAD features and support. For example, the Quick Zoom function, which simultaneously zooms and recalculates the center of rotation. The CadMouse includes a dedicated middle mouse click and radial menu button as well.

Overall goal of connectivity

The integration with 3Dconnexion's products contributes to BIMcollab's overall goal of BIM collaboration, connectivity and improving BIM workflows. The integration offers ZOOM users a two-handed working style, which makes navigating through models, running clash detections and extracting data that much smoother.

"3Dconnexion is constantly expanding its portfolio of products and thereby also focuses on BIM users. We are excited about the successful collaboration with BIMcollab and that our mutual customers can now take advantage of both SpaceMouse and CadMouse products in BIMcollab ZOOM."

Jason Rodriguez, Product Manager at 3Dconnexion

Datakit releases version 2021.4 of its technical data exchange software

7 October 2021

Datakit, the independent CAD interoperability specialist, releases version 2021.4 of its SDK. The Datakit conversion solution can now read glTF files, as well as the latest versions of Parasolid (V34) and NX (V1988) files. The Datakit SDK now also allows the reading of "scenes" from CATIA V6 / 3DEXPERIENCE.

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The latest update to Datakit's CAD format conversion software range allows specialized editors to get the most out of reading or writing 2D or 3D technical files of many native or standard formats.

What changes in Datakit V2021.4 technical data exchange software?

gLTF reading

The Graphics Library Transmission Format (gLTF) is widely used by editors (especially of video games) to quickly display models or entire scenes. A 3D gLTF file contains information about the 3D mesh, materials, textures, tree structure, and can be viewed on a WEB browser.

After integrating ***gLTF writing*** in early 2021, ***Datakit's technical data exchange tool*** is enriched with a library for ***reading gLTF 2.0 files***. The Datakit SDK now allows ***reading and writing of .gltf and .glb suffix files***.

Parasolid V.34 reading

Parasolid is a geometric modeling kernel published by Siemens PLM Software.

It is updated regularly and, like for all other 2D and 3D PLM software, Datakit translates these changes into its API for reading and writing technical data. ***The Datakit libraries can now read Parasolid version 34 data***.

NX reading

Siemens regularly releases new versions of the NX CAD software. Datakit SDK V2021.4 supports these new versions and can therefore ***convert NX files up to NX 1988 version***.

Reading of CATIA V6 / 3D Experience “scenes”.

The Datakit Version 2021.4 API can now ***read the geometric and graphic data of 3DExperience (.3dxml) scenes***.

Continuous improvement of Datakit’s PLM interoperability solutions.

Datakit OEM customers benefit from the ***continuous improvement of the libraries and kernel*** for reading, writing and converting 2D and 3D formats.

These improvements also apply to CrossManager. CrossManager is a stand-alone software published by Datakit, which can ***convert files from most CAD formats*** for end-users needs.

IFC writing is now integrated into CrossManager.

Elysium - Release Announcement of CADfeature 16.0 M6

4 October 2021

Elysium has released CADfeature 16.0 M6.

Key Enhancement

- Improved feature and drawing translation especially from Creo Parametric to NX along with other bug fixes.

Support New CAD Version

CAD	Versions added in 16.0 M6	Supported Versions
CATIA V5	R31 (V5-6R2021)	R23 (V5-6R2013), R25 (V5-6R2015) – R31 (V5-6R2021)

NX	1980 Series	1847 Series – 1980 Series
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EPLAN- PLM Integration: Field cabling now included

4 October 2021

EPLAN has expanded its Teamcenter Connection to include compatibility with Harness proD. That means that wire harnesses, cable sets and manufacturing drawings, all in 3D, can be transferred directly to PLM systems such as Teamcenter and PTC Windchill. Procurement, production and maintenance are thus also supplied with relevant information. The result is a complete bill of materials as well as comprehensive manufacturing drawings. EPLAN's Head of the PLM Competence Center Arnd Paulfeuerborn explains: "Nowadays it's essential that engineering data can also be fed into downstream areas. With the new integration for Harness proD into Teamcenter and PTC Windchill, manual processes in the area of field cabling can now be replaced by completely digitalised processes."

In industries such as machine building and plant system engineering in particular, the proportion of cabling outside the control cabinet is also increasing or it is being documented more precisely. With this new interface, EPLAN is integrating its system into existing PLM cycles for common user benefits.

Integration: Features & Functions

The interface covers the essential requirements from the area of product data management. This includes the manufacturing data management for EPLAN data; opening, saving and revising; support for all approval and change processes; creating and updating EPLAN evaluations; synchronising project attributes; adopting naming and numbering rules; generating, saving and revising EPLAN bills of materials in Teamcenter or PTC Windchill; and authenticating the EPLAN user and assigning rights in the PLM environment. The integration of the systems into the EPLAN interface means that users can easily and conveniently access the respective PLM system from their familiar working environment.

Integrated and end-to-end data flows ensure transparency and support collaboration between various disciplines. The integrated exchange of information between the commercial production, engineering and manufacturing information results in better solutions for users and a continuous workflow.

Hexagon and Stratasys partnership unlocks aerospace innovation and reduces part lead time with certified design-to-3D-print solution for plastics

8 October 2021

Hexagon's Manufacturing Intelligence division has announced a new solution with Stratasys, a leader in polymer 3D printing solutions, to help manufacturers in the aerospace sector boost confidence in the performance and safety of 3D printed plastic components and compress time to market. Through the virtual engineering and manufacturing support provided by the partnership, customers will be able to reduce a two-to-three-year timescale of designing and testing a part to six-to-nine months.

Through the new partnership, users of Stratasys' ULTEM™ 9085 filament can now use Hexagon's Digimat material modelling software to predict how printed parts will perform. ULTEM™ 9085 filament is used to produce parts for aircraft cabin interiors, such as bracketry, pieces for cable routing, covers and duct components, all of which are required to meet stringent certification, for example around flammability and toxicity. Airbus has used FDM™ technology in these applications dating back to 2014. Some customers also use the material in cosmetic aircraft interiors, such as Diehl aviation, which has used it to create curtain headers that divide cabin classes for the Airbus A350.

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In aviation, the need for the material to meet certification standards is paramount. ULTEM™ 9085 resin is a flame-retardant, high-performance thermoplastic with a high strength-to-weight ratio, excellent heat resistance and high impact strength, and possesses favourable flame, smoke, and toxicity (FST) characteristics. The material modelling software provides engineers with a validated tool for analysing how this material will perform mechanically in a product design when printed with two compatible printers

Using Digimat, engineers will be able to predict how parts made from ULTEM™ 9085 filament may behave when made using approved Stratasys printers. This is made possible through a highly accurate virtual material model jointly developed by the two companies through physical testing that includes detailed information about the material's internal microstructure. The software's process simulation capabilities help manufacturers avoid defects such as the delineation of warpage of a part and analyse the print time and material cost for the proprietary printer toolpaths of these machines to achieve an optimal result.

The solution gives aerospace engineers a number of benefits:

Increased confidence – Aircraft need to meet stringent regulations, and manufacturers have to convince and prove to regulators how a part will perform. While this has previously meant years of testing, now – through Digimat - they have access to a validated analytical tool that engineers can use to predict a part's behaviour with confidence

Faster speed to market – By improving understanding of material performance and reducing the number of physical prototype iterations, the timescales of the development and introduction of new parts – and therefore aircraft – can be significantly compressed, accelerating in innovation.

Better understanding – Until now, engineers have been unable to understand how the material properties apply toolpath by toolpath, layer by layer on a complex geometric part. This has led to time consuming and expensive testing processes, using datasets based on the destructive testing of material coupons rather than real part geometries, meaning that testing never delivers full confidence in the material's performance.

In addition, since they can explore more iterations of a part in a shorter amount of time, engineers can gain a greater understanding of what will work on the market.

Sustainable design – Engineers can validate that a part can be 3D printed and make optimal use of materials to lightweight aircraft or spacecraft.

Guillaume Boisot, Head of ICME, Hexagon's Manufacturing Intelligence division says: "The aerospace industry is continuously pushing the boundaries of performance and innovation, but current confidence in the performance of additive manufactured parts is mostly limiting its application to highly specialised metal parts. We are excited that this new development in our partnership with Stratasys will help compress the design and testing phases and improve understanding of plastic behaviour and speed up innovation across the sector."

Scott Sevcik, Vice President, Aerospace Business Segment for Stratasys adds: "The dual needs to make complex parts lighter and produce low volumes economically has meant that aerospace has pulled 3D printing towards production and put the sector ahead of the curve in use of the technology. But this also means it's the first industry to identify several challenges, a key one being the need for a digital toolset to provide confidence in 3D printed parts. Our partnership with Hexagon is a big step forward in solving that, as it gives engineers the same upfront design intelligence for 3D printing that they have for traditional processes."

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The virtual engineering solution can now be accessed by customers of the Digimat material modelling software. Stratasys customers can request access to detailed proprietary material cards through its Materials Exchange capabilities and import toolpaths directly from their Stratasys Insight software. For more information on virtual manufacturing of plastics and Digimat please visit <https://www.e-xstream.com/10x/virtual-manufacturing> and for more information on Stratasys' ULTEM™ 9085 filament please visit <https://www.stratasys.com/materials/search/ultem9085>

Introducing the Solid Edge Wiring & Harness Design Free Trial

4 October 2021

Anthony Johnson of Siemens Digital Industries Software introduces the new free trial of Solid Edge Wiring and Harness Design on their blog. Read the full post for details <https://blogs.sw.siemens.com/solidedge/introducing-the-solid-edge-wiring-harness-design-free-trial/>.

Leading Design Firms Collaborate with IMAGINiT Technologies to Create New Clarity Space Programming Module

4 October 2021

IMAGINiT Technologies has developed a new Space Programming Module add-on for IMAGINiT Clarity that addresses common space planning challenges that firms face on complex architectural projects. In addition to this optional, add-on module, the new 2022.1 version of IMAGINiT Clarity now includes a variety of features that enhance integrations and model metrics for Autodesk Revit and AutoCAD users.

“Many *Engineering News Record's* Top 500 Design Firms who already own IMAGINiT Clarity, recognize that space planning challenges exist for many architectural firms,” says Bill Zavadil, president, IMAGINiT Technologies. “As power users of IMAGINiT Clarity, data savvy firms like Leo A Daly and the DLR Group provided directional guidance to our software developers to create a tool to identify ways to accelerate design creation, improve design verification and track deviations from space programming plans. The IMAGINiT Space Programming module is the outcome of this collaboration and is now available to benefit the entire architectural design industry.”

“I’m really excited to see programmed data added to Clarity,” stated William Carney, design technology leader and principal, DLR Group. “To me, this was always the missing piece in an already powerful data and automation tool. The Clarity team has done a great job providing a flexible data management solution for projects, from planning stages through building operation, that offers time-saving solutions through automation. I think the ease of working with Excel will appeal to many of our experienced planners and break many of the data silos our design teams face.”

IMAGINiT Clarity’s new Space Programming Module automates the traditionally inefficient and manual early-stage planning and programming process into a streamlined workflow. The Space Programming Module seamlessly integrates the pre-design space planning work into the Revit model with innovative import tools and powerful APIs, all via Clarity. This new unified workflow accelerates design creation, improves design verification, and reduces the redundancies and errors that occur when manually inputting Excel-based room, furniture, and other space-related data into the building information model.

Clarity 2022.1 Offers Enhanced Integrations and Model Metrics

IMAGINiT Clarity 2022.1 supports Autodesk Revit and Autodesk Revit Server 2018, 2019, 2020, 2021

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and 2022. This latest release offers BIM coordinators and planners improved building information model (BIM) integrity and collaboration with integration, Autodesk AutoCAD and metric enhancements including:

- New Egnyte integration including delivery, post task action and sync task
- Enhanced Google Drive integration including full support for Google Workspaces with Google drive sync task
- Increased ability to collaborate on projects with enhanced SharePoint integration including ProjectWise downloads directly to Teams, OneDrive and SharePoint as well as metadata mapping
- New Autodesk AutoCAD metrics tasks identify broken links as well as the number of RegApps and Circular links, and more
- Ability to leverage Community Metrics to identify key metrics and compare them to anonymized data from other firms to identify best practices

Clarity Overview and In-depth Webcast

At IMAGINiT's virtual Autodesk University 2021 booth on October 6 at 4:00PM Eastern, Joe Eichenseer, director of building solutions, will provide a high-level overview of the latest Clarity features. For a deep dive into Clarity on-premises and Clarity Cloud, IMAGINiT is also offering an exclusive 60-minute webinar with Matt Mason, director of software solutions at IMAGINiT Technologies, on October 21 at 1:00PM Eastern. This webinar will unpack each of the newest Clarity features, including how the new Space Planning Module solves real functionality and critical time challenges with organized, repeatable workflows. Attendance is free, but registration is required.

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Medidata Launches Groundbreaking Sensor Cloud Network to Connect Digital Health Innovators

6 October 2021

Medidata, a Dassault Systèmes company, announced the launch of Medidata Sensor Cloud Network at NEXT Global 2021. The **Medidata Sensor Cloud Network** will create the first industry-wide collaboration amongst contract research organizations (CROs), device manufacturers, drug and vaccine developers, analytics companies, and academia focused on solving challenges related to sensor integrations, standardization of sensor data, and the development of digital biomarkers and algorithms. This collaborative environment and approach is unique in its ability to connect to the Medidata Sensor Cloud, which provides the ability to ingest, normalize, and analyze data into a common format.

“The most important innovations in healthcare will come from interdisciplinary collaboration. The Medidata Sensor Cloud Network is intended to provide structure and technology enablement to bring exciting new innovations to market even faster,” said Anthony Costello, CEO of Patient Cloud at Dassault Systèmes. “We’re excited to see how our collaborators will utilize this unique offering to bring

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the next generation of care to patients.”

Following the **launch** of Medidata’s Sensor Cloud and Labcorp Drug Development’s **recent adoption** of the offering, researchers, data scientists, engineers, and clinicians have been sharing data sets, working together on similar projects, breaking down information silos and helping each other develop new insights and algorithms in an accelerated manner. Breakthroughs from these collaborations will help optimize patient care through better treatments and interventions, improve outcomes and decrease healthcare and clinical trial costs. The Medidata Sensor Cloud Network will also accelerate new partnerships between sensor companies, increasing the number of medical grade data streams available for clinical researchers.

Medidata is offering stakeholders training modules in the areas of sensor integrations, data analytics, clinical operations, enablement and a wealth of information sharing guidelines to facilitate distributed, curated collaboration from thought leaders. Additionally the Medidata Sensor Cloud Network includes development tools that will allow data scientists to refine, test and deliver physiological algorithms with clinical meaning at scale. Examples include refined motion parameters like gait, cardiovascular insights and advanced sleep metrics.

To stimulate early collaboration in the Medidata Sensor Cloud Network, Medidata will be sponsoring a Hackathon Challenge with sensor data sets that will be made available to participants. This event is intended to tackle some of the toughest questions in both the use and utility of sensor data in clinical research settings.

Medidata is a wholly owned subsidiary of Dassault Systèmes, which with its 3DEXPERIENCE platform is positioned to lead the digital transformation of life sciences in the age of personalized medicine with the first end-to-end scientific and business platform, from research to commercialization.

NTT DATA Introduces Global Insurance Digital Platform (GIDP™) for the Life & Annuity Industry

30 September 2021

NTT DATA, a digital business and IT services leader, announced the launch of their Global Insurance Digital Platform (GIDP), a cloud based, digital platform and partner ecosystem, that provides best-in-class consulting, partnerships, Business Process as a Service (BPaaS), Third-party Administration, and technology to the Life & Annuity Industry. Along with partner integration, GIDP provides the ability to quickly launch new products, proactively use data, reduce operational costs, mitigate risk, and remain competitive.

“The new virtualized world has forced a digital operating model on life insurers and many of them, along with solution providers, are taking the digital challenge as a must to survive and thrive,” **said Keith Raymond, Senior Analyst at Celent**. “The pandemic accelerated digital adoption and platforms that connect an ecosystem of core administration systems, claims management, agent automation, and analytics help insurers leverage their existing investments and get to market faster.”

GIDP’s componentized approach connects seamlessly via event-based APIs and is built on a strong foundation of deep industry knowledge, BPO, infrastructure, security, compliance, and automation. GIDP promotes business process digitization, improves decision-making based on robust data, and delivers product innovation.

GIDP’s ecosystem provides clients with immediate access to our wide array of industry-leading, global and regional partners – offering turnkey solutions across the value chain. While GIDP is global, it

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provides the unique benefit of being a highly customizable, regional solution, specific to individual needs to help each client speed up their digital transformation journey and enhance the end user experience.

Designed for Life and Annuity Industry Needs:

- ***Business Process as a Service (BPaaS)*** -- Rapidly scale with our mature TPA/BPO processes to deliver end to end cloud-based business process services or specific functions.
- ***Data, Analytics & AI*** -- Support regulatory compliance, distribution analytics, data-driven processes, straight-through processing, hyper-personalized customer interaction, and underwriting.
- ***Digital Core Modernization*** -- Launch and expand new platforms and ecosystems with cost containment, efficiency, and simplified application rationalization.
- ***Digital Customer Engagement*** -- Align the carrier with distributors, including portal and mobile channels, and utilize customer insights.
- ***New Business and Rapid Product Launch*** -- Test and learn with new products, distribution channels and new markets.
- ***Non-Strategic (Closed) Blocks*** -- Realize immediate access to capital, de-risked balance sheets, and a reduction in operational costs.

“We are in the ERA of interconnected companies,” ***said Masahiro Kashibe, Global Insurance Alignment Lead at NTT DATA Corporation.*** “NTT DATA’s Global Platform brings together best of breed partnerships to support our clients in accelerating the journey to maximize data and digital transformation and to optimize processes, costs, innovation and increase client engagement.”

Powerful New Advancements Strengthen Autodesk Construction Cloud

5 October 2021

Autodesk, Inc. has announced powerful new capabilities across Autodesk Construction Cloud and an expansion of its partner ecosystem, delivering new ways for construction teams to connect their workflows on one platform. Advancements to Autodesk Build, including a new Schedule management tool, further connect office and field teams and data across the construction lifecycle. Project teams can now also integrate construction data from over 200 partners on Autodesk Construction Cloud to streamline construction management in one centralized location.

"In today’s increasingly digitized construction industry, connecting project stakeholders and data is critical for the collaboration and insights teams need for their competitive edge," said Sameer Merchant, vice president of product development, Autodesk Construction Solutions. "Consolidating data from various project workflows into a common data environment gives team members access to the information they need when they need it and empowers project leaders to make informed decisions. Since we launched Autodesk Construction Cloud, we have been focused on connecting office and field teams and enabling easier collaboration from a single source of truth; we have introduced nearly 250 product innovations just this year. Our newest developments are another milestone for connected construction."

New Schedule tool in Autodesk Build bolsters project management

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A new Schedule tool in Autodesk Build empowers teams to centralize schedule management and work from the most up-to-date activities and milestones to keep their projects on track. Office and field teams can instantly share digital schedules, collaborate on updates as they happen and link documents, sheets, photos, issues, assets, RFIs and submittals to their communications for reference. Teams can also filter and search their schedules and view them in calendar or chart formats to see activity status in real time. Additionally, Schedule integrates with the Cost tool in Autodesk Build to simplify budgeting and planning for schedule-related expenses including general conditions such as material handling and clean-up. The Schedule and Cost integration delivers project-level data analyses, enabling teams to accurately forecast cash flow.

"Distributing schedules across the team and ensuring everyone is on the same page is often time-consuming," said Bryan Nuckolls, project manager, Boldt. "Traditional and siloed schedule management requires updating spreadsheets, publishing them as PDFs and emailing them around to the team. By automating schedule communication in Autodesk Build, we save valuable project time and keep our team updated on the latest, while remaining in the same solution that houses our other critical project information."

Additional recent updates to Autodesk Build include:

- **Sheet sharing across accounts** – Customers can now connect data across their entire project teams. Linking sheets across different accounts gives teams the ability to share the latest sheets with other external team members including owners and other contractors who need access but may not be part of the main project account.
- **Pype AutoSpecs integration** – Pype AutoSpecs automatically generates submittal logs to deliver efficiency, automation and accuracy to the submittal process. Its integration with Autodesk Build enables teams to transfer draft submittals and entire logs directly and seamlessly into their project management base for simplified submittal management.
- **Microsoft Teams in Meetings** – Customers can now set up Teams meetings directly in Autodesk Build, without having to switch between other applications.
- **Data extraction & analysis** – Support for sheets, transmittals and design review data extractions using Data Connector, plus new Power BI templates, lets teams analyze and optimize document management workflows for improved design review processes.
- **As-Built** – Teams can easily filter, find and export all relevant as-built information such as Sheets, RFIs and Submittals, and carry over links to other related documents like files or photos from within Autodesk Build.

To continue Autodesk Construction Cloud's momentum, additional capabilities coming to Autodesk Build include:

- **Progress Tracking** – Teams can track the percentage of work completed on their projects and quantify the materials installed to update plans accordingly;
- **Work Plan** – A new collaborative space, based on BIM 360 Plan, where teams can build their roadmaps, track commitments, manage constraints and view progress towards key performance metrics;
- **Closeout** – Automation of handover document collection and review workflows, supporting project lifecycle data management in Autodesk Construction Cloud;
- **Bridge** – New collaboration capability that lets teams share key project data between firms without having to share an entire project, and gives each team agency over their own project data

archive.

Expanded integration partner ecosystem streamlines data across workflows

Autodesk Construction Cloud now features over 200 partners leveraging Partner Cards and APIs, including Forge APIs, to deliver strong and meaningful integrations for customers who want to simplify data management and boost their ability to make more informed project decisions. With the expanded partner ecosystem, customers can integrate data from their safety, mixed reality, analytics and reality capture solutions, for example, to Autodesk Construction Cloud and maintain a centralized view of their project information to make decisions with more context. Among the latest integrations are Build.Works, Cupix, eFiler, NTI and RealWear, as well as hh2's integration between Autodesk Construction Cloud and Sage 300 Construction and Real Estate.

"Financial accounting in 'real time' is critical to providing project teams with accurate cost information," said Dennis Stejskal, director, construction and real estate, Sage. "We are excited to come together with hh2 and Autodesk to deliver an industry-leading integration between accounting and operations. Our partnership can help construction teams increase collaboration and data visibility between field-facing teams and accounting so project managers can make timely informed cost decisions."

New integrations also include 3D Repo, Aespada, Airtable, ArcGIS GeoBIM, Arkio, BIM HoloView, DAQS, Embneusys, Geometrid, GoFormz, Google Workspace, Join, Novade, Oculo, OpticVyu, ProNovos, Safe Site Check In, Shepherd, SiteKick, Stevenson Systems, StructShare, Tomorrow.io, UpKeep, vGIS, viAct and WakeCap.

The App Gallery is also now available, making it easy for account administrators to connect Autodesk Construction Cloud platform products with third party partner applications such as augmented reality solutions and jobsite cameras. Teams can explore a range of direct integrations that leverage the Forge open platform and quickly activate integrations to further simplify data management with automated and seamless data flow.

Additionally, Autodesk Construction Cloud Connect now supports Autodesk Takeoff, so customers can customize integrations to export information including quantities, property definitions, model mappings and classifications into a variety of software applications such as Smartsheet, Airtable, QuickBase and Microsoft Excel.

Propel Launches Supplier Community Solution for Manufacturers

6 October 2021

Propel, developer of the only unified quality management (QMS) and product lifecycle management (PLM) solution built on Salesforce, announced the Propel Supplier Community, a new solution to improve supply chain collaboration. It will allow manufacturers to more effectively manage dynamic supply networks within a modern, secure environment optimized for rapid onboarding, continuous performance monitoring, and immersive collaboration.

Manufacturers are adjusting to massive supply chain disruptions across the entire value chain and at every stage of the product life cycle: design, engineering, offshore production and beyond. On premise solutions require workarounds - such as third-party file sharing, VPNs, and external firewall access - which increase risk and overhead. This hinders collaboration, reducing the number of suppliers that manufacturers can productively engage -- an outcome they cannot afford in the current environment.

“As manufacturers are constantly challenged to balance risk mitigation, design innovation and cost

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management, Propel's Supplier Community enables our customers to extend the value of Product 360 to their strategic and operational suppliers," said Ray Hein, co-founder and CEO, Propel. "By removing the friction that external users typically confront, this new solution will help manufacturers to easily onboard and collaborate with suppliers anywhere in the world."

The Propel Supplier Community will be available in calendar Q1 2022 and enables:

- A secure environment for collaboration between original equipment manufacturers (OEMs) and authenticated suppliers to safeguard intellectual property
- An intuitive and configurable role-based user experience to facilitate broad supplier adoption
- Embedded communication associated with the product definition to capture knowledge in context and improve decision-making
- Supplier-initiated change requests to reduce design and change cycle times
- Flexible pricing for OEMs featuring user-based licensing for strategic suppliers and usage-based licensing for operational suppliers to reduce cost of ownership
- Access for contract manufacturers (CMs) and support for a range of business models: Build-to-stock (BTS), engineer-to-order (ETO), and configure-to-order (CTO)
- Closed loop quality management through continuous feedback to improve product quality, reduce warranty expense, and speed issue resolution cycle time

"Just like the focus on the customer experience is driving improved engagement between businesses and consumers, the field of supplier collaboration holds strategic importance for many companies. Every day brings news of new supply chain disruptions," said Peter Bilello, CEO & President, CIMdata, Inc.

"More than ever, product companies need efficient and effective ways to identify, qualify, onboard, and collaborate with suppliers to ensure product quality and business continuity. Propel Supplier Community has the potential to redefine OEM-supplier collaboration with its innovative approach to improving insight and reducing friction within supply networks," he further added.

Attendees of Propulsion 2021, Propel's second annual virtual conference, will get a first look at the new Supplier Community. The event will be held October 12-13, 2021 and will include keynotes from top experts, including the acclaimed author of *Crossing the Chasm* and *Zone to Win*, Geoffrey Moore; political pundit and lobbyist Bruce Mehlman; and Salesforce's SVP Manufacturing, Automotive, Energy, Travel, Transportation, & Hospitality, Manufacturing Evangelist Cindy Bolt; and more.

Siemens brings design automation, more accessible part manufacturing and greater collaboration capability to Solid Edge 2022

6 October 2021

Siemens Digital Industries Software has released the 2022 version of Solid Edge® software, which brings embedded rules-based design automation, greater capabilities to work with point-cloud, mesh and imported data without the need for translation alongside new tools to for 2.5 axis machining and ultra-efficient upfront fluid flow simulation. Part of Siemens' Xcelerator portfolio of products, Solid Edge is an intuitive product development platform for accelerating all aspects of product creation, including 3D design, simulation, visualization, manufacturing, and design management.

Highlights for Solid Edge 2022 include:

The new embedded ***Solid Edge Design Configurator*** adds rule-based automation and enables quick customization of products based on design parameters and rules, saving time and enabling the capture

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and reuse of intellectual property in intelligent models.

CAM Pro 2.5 Axis milling is now included in Solid Edge Classic, Foundation and Premium for customers with active maintenance. Fully integrated, it maintains full associativity with design data and provides automated tool path creation combined with machining simulation to help achieve optimized machining operations.

New **CAD Direct** capabilities allow insertion of third-party data formats without the need for translation while maintaining associativity. Solid Edge 2022 continues to integrate Siemens' leading **Convergent** modeling technology, allowing users to mix b-rep and mesh geometries in the same model, again without conversion, making mesh data more useful and reducing product modelling time. **Full-color point cloud data** can also now be used for visualization purposes directly within Solid Edge, especially useful when retrofitting factories or plants, allowing the positioning of design equipment in the context of the point clouds.

Solid Edge 2022 is available through **Xcelerator as a Service**, providing access to Siemens' next-generation, cloud-based collaboration solution including **Xcelerator Share**, that brings design-focused capabilities (such as 3D/2D CAD view/markup), augmented reality and secure project-based sharing to the Solid Edge community.

“We have been working with and listening to our customers, and in response Solid Edge 2022 has been engineered to help them grow their businesses,” said John Miller, Sr. Vice President, Mainstream Engineering, Siemens. “The enhancements to Solid Edge 2022 better support modern product development and manufacturing processes, allowing our community of users to do more with available resources and to enable new ways of working that will foster greater innovation.”

Assembly modelling is a constant focus and the 2022 release of Solid Edge delivers the third straight release of improvement. The new **Assembly preview** mode reduces the amount of data that is loaded, while **multi-body assembly modeling** mode is a new environment to model internal components within an assembly file. When it comes to locating those hard-to-find parts, the new component finder puts intuitive search at the fingertips with auto-complete suggestive filters.

Finally, Solid Edge 2022 introduces **Simcenter™ Flomaster™ for Solid Edge** software, which brings easy analysis of fluid and thermal flows in piping systems. System-level models are extracted from 3D models (reducing preparation time by up to 90 percent). Built in wizards guide new users towards successful results, while retaining advanced capabilities, such as simulation of rapid dynamic events and pressure surge, for experienced users.