

PTC Live Global 2014

CIMdata Commentary

Key takeaways:

- *Over 3,000 PTC customers and employees convened in Boston at PTC Live Global 2014 on June 16-19.*
- *PTC expanded on their Internet of Things and Service Lifecycle Management visions, and premiered Creo 3.0, a major step on their MCAD evolution journey.*
- *The acquisition of Atego, a systems engineering tool and services provider, brings leading-edge tools and skills that help PTC offer closed-loop lifecycle management.*

CIMdata recently attended PTC Live Global 2014 in Boston, MA, USA. PTC Live Global gives PTC customers the opportunity to not only hear and explore PTC's solution strategies and roadmaps, but also to showcase their own work, network with peers, share ideas, and discuss how they are addressing their challenges. PTC reported that over 3,000 attendees representing approximately 2,000 companies were present at the event. They also stated that over 500 PTC personnel were in attendance. Major themes at PTC Live Global were the Internet of Things (IoT) and its potential impact on the manufacturing industry, new Creo multi-CAD capabilities, expanded systems engineering solutions and services with the announced acquisition of Atego, and expanded Service Lifecycle Management (SLM) solutions.

In his opening keynote, PTC President and CEO Jim Hepplemann emphasized how smart connected devices will redefine the value chain. He cited a prediction from Cisco that in 2020 there will be 50 billion connected devices worldwide, roughly six times as many as people on Earth. PTC estimated that by 2020 over 100 million applications will need to be developed to support and manage the IoT. Mr. Hepplemann stated that the integration of smart products within the IoT will enable companies of all types to offer new, innovative products and services to their customers and to create true closed-loop lifecycle management.

PTC made several major announcements at PTC Live Global. These included:

- PTC Creo 3.0 with Unite Technology with significantly expanded multi-CAD capabilities
- PTC Creo Elements/Direct 19.0
- ThingWorks 5.0 Platform
- The agreement to acquire Atego, a developer of model-based systems and software engineering applications and services
- PTC Service Lifecycle Management (SLM) System for smart, connected product and service efficiencies

Atego

PTC announced that it has signed a definitive agreement to acquire Atego, a developer of model-based systems and software engineering applications based in Cheltenham, UK, for approximately \$50 million in cash (2.5 times the company's 2013 revenues). Artisan Studio, their model-based systems engineering (MBSE) solution, is designed to connect requirements engineering, architecture modeling, physical product definition, and system verification functions. The solution is intended to help with efficiency and process

standardization, and enable distributed and multi-disciplinary teams to collaboratively build digital models of complex systems. CIMdata believes that the acquisition of Atego will strengthen PTC's systems engineering initiatives with modeling capabilities and experienced practitioners.

Creo 3.0

Michael Campbell, PTC's Executive Vice President CAD Segment, introduced the Creo 3.0 release highlighting the company's new Unite Technology for handling multi-CAD product files. Unite Technology, included in the base Creo solution at no additional charge, allows a user to activate native CAD files from competitors' CAD solutions directly into Creo. The geometry data enters in simple b-rep format without parameters, history, or form-features, but can be manipulated and edited using Creo's direct modeling techniques. With this capability, PTC joins the leaders in multi-CAD access by allowing either "import" where a copy of the foreign data is made in Creo native format or "open" where no copy is made and therefore cannot be edited. Creo 3.0 has some limits on which CAD native files can be accessed and when access capability is delivered.

In a second major enhancement, Creo 3.0 improves a user's ability to explore design alternatives. The announced Design Exploration Extension allows a user to set a checkpoint at any time during a design session and remember the construction history that produced the current model. The user can then continue working, adding to the design, and then set additional checkpoints, go back, and branch off in a different direction from any checkpoint, all within the same part file. The designer can then flip between checkpoints to compare and select the best alternative. Other CAD products allow similar capabilities, but at the expense of generating part file copies.

ThingWorx

PTC intends to allow ThingWorx to operate with considerable independence and to pursue the natural markets that it has developed. According to Russ Fadel, President of ThingWorx, those markets are 1) connected operations, 2) connected products, and 3) connected sensors & devices (i.e., smart applications). The value propositions within these markets were illustrated through a set of customer-presented case studies that ranged from sensor pills for cattle feed and health management, to traffic signs with imbedded sensors and transmitters to monitor patterns and adjust to optimize traffic flow.

At the same time it became clear over the two days of strategy and roadmap presentations that PTC will aggressively embed the power of ThingWorx as an enabler of the IoT into its solution portfolios. Over time PTC stated that they would be using ThingWorks to add real time product connectivity and condition monitoring to their existing SLM, ALM, and PLM solutions to enable increased process efficiency and perform more complex analytics so that their customers can increase the value of their products for their customers.

SLM

At last year's event PTC heavily promoted "services as a business" and the value of managing the services lifecycle. This year PTC expanded on these subjects with a more highly developed model of the services continuum, supported by research and compelling customer case studies. Kevin Wrenn, Vice President Service Lifecycle Management (SLM) Support, led off with a discussion about the evolution in services as more companies shift from services to support product sales to services as the lead for selling outcomes, e.g., power by the hour for aircraft engines or a given volume of conditioned air at specified

temperature and humidity levels for a building. He described a continuum of service models across which companies provide increasing levels of services and the suite of SLM solutions that PTC is putting into place to support these new service business models.

Mr. Wrenn built upon the IoT vision presented by Jim Heppelmann the day before, stating that the PTC SLM portfolio is designed to provide an integrated set of solutions that enable a company to plan, execute, and optimize service for smart products across their entire network, regardless of task, role, product, or geography. With real time visibility to product performance in the field a whole new level of service offerings become possible.

Cindy Elliot, PTC's Senior Director, SLM Market, promoted a lively discussion when she presented early findings of research conducted jointly with Oxford Economics on the current state and future trends in services business. There were a range of views expressed regarding the rate of evolution of the services business but there was broad acceptance that the drivers for the shift are compelling: 1) growth, 2) profitability, and 3) providing a cyclical hedge. Ms. Elliot's report was followed by a detailed case study presented by Joe Bergman, VP and GM, NA Compressed Air Systems and Services, Ingersoll Rand. Mr. Bergman laid out the long-term journey that his \$12 billion company has taken from warranty service and reactive maintenance, to proactive maintenance and retrofit & upgrades, ultimately offering complete physical product and service solutions with continuously optimized performance. The connection to PTC's solution set was clear and compelling.

Summary

PTC continues to expand its solution portfolio to address the full needs of its customers to design, develop, manufacture, and service innovative, high value products. CIMdata thinks that acquisitions like ThingWorx and Atego should enable PTC to better respond to their customers' needs for solutions that can improve their competitiveness. PTC's approach towards and solutions for SLM and IoT address the growing importance of managing smart devices and providing improved services, and they are key components to providing closed-loop lifecycle management.

About CIMdata

CIMdata, an independent worldwide firm, provides strategic management consulting to maximize an enterprise's ability to design and deliver innovative products and services through the application of Product Lifecycle Management (PLM). CIMdata provides world-class knowledge, expertise, and best-practice methods on PLM. CIMdata also offers research, subscription services, publications, and education through international conferences. To learn more about CIMdata's services, visit our website at <http://www.CIMdata.com> or contact CIMdata at: 3909 Research Park Drive, Ann Arbor, MI 48108, USA. Tel: +1 734.668.9922. Fax: +1 734.668.1957; or at Oogststraat 20, 6004 CV Weert, The Netherlands. Tel: +31 (0) 495.533.666.