

# SOLIDWORKS 2015 Launch: Broadening the Portfolio, Enabling the Community

## *CIMdata Commentary*

### *Key takeaways:*

- *SOLIDWORKS 2015 delivers new Model-Based Definition and top-down design solutions*
- *My.SolidWorks.com expanding to include two priced options that will include file transfer between users and access to online training*
- *SOLIDWORKS Industrial Conceptual brings a cloud-based conceptual design solution to the SOLIDWORKS portfolio*

Bertrand Sicot, Dassault Systèmes SOLIDWORKS CEO, hosted a briefing with industry analysts September 5, 2014, to discuss the launch of SOLIDWORKS 2015. He noted that in 2013, SOLIDWORKS garnered revenues of US\$555.1 million, accounting for approximately 20% of parent company Dassault Systèmes' total revenue. Suchit Jain, Vice President of Strategy and User Advocacy joined him, taking justifiable pride in the user community that has built up around SOLIDWORKS with 2.49 million licenses worldwide across slightly more than 200 thousand customer companies. In addition, 1.9 million student licenses placed in 28 thousand schools foster a next generation of SOLIDWORKS users. CIMdata recognizes the SOLIDWORKS community as one of the strongest in the industry. All SOLIDWORKS users will continue to benefit in the future from the continued market penetration of SOLIDWORKS with the next generation of design engineers.

Mr. Jain reported on the progress of their portal My.SolidWorks.com—first introduced at their annual user conference SOLIDWORKS World 2013. The portal allows users to aggregate company and community knowledge by pulling relevant information from forum discussions, blog posts, YouTube, Twitter, help files, and more into a single view that can be customized so the user will only see the information most relevant to them. He announced that in October 2014, the free My.SolidWorks.com service will be augmented with two paid solutions, MySolidWorks Standard and MySolidWorks Professional. Each paid solution will allow the inclusion of valued-added reseller (VAR) technical content; design sharing via DropBox, GoogleDrive, and similar applications; and online training ranging from 10 to 100 hours depending on the solution purchased. Mr. Jain also indicated that in the future they hope to open a dialog with users through enhancements to My.SolidWorks.com. CIMdata has long emphasized the role social media and collaboration play in product development and encourages SOLIDWORKS to continue to aggressively pursue closer ties with their user base through My.SolidWorks.com. The SOLIDWORKS community as a whole benefits from being able to express their future requirements and to learn new skills from other users.

Aaron Kelly, Vice President of User Experience & Product Portfolio Management, then introduced the enhanced capabilities of SOLIDWORKS 2015 under the banner of “Inspiring Innovation.” He categorized the focus of the new release along four strategies:

- Improving productivity; getting everyday work done faster and more easily
- Optimizing the work process by sharing information across the global team
- Reducing costs by integrating design with downstream processes
- Solving more design challenges by addressing industry-specific tasks

Leading the list of key improvements is a new Model-Based Definition (MBD) solution quoted at US\$1,995 per license. MBD is the practice of using 3D models to document additional information about a design, such as 3D PMI (product manufacturing information) and associated metadata. The types of information included with the 3D model range from geometric dimensioning and tolerancing (GD&T) to material specification and surface finish. Through the use of MBD practices, users can save time by eliminating the need to create 2D drawings, and improve quality by communicating more accurately. Dimensions and annotations on the 3D model provide a clearer understanding of the product and reduce ambiguities often found in 2D drawings. These can lead to errors and force excessive scrap and rework. CIMdata remains a strong proponent of MBD and its benefits. All product development companies need to recognize the advantages of the MBD approach. The SOLIDWORKS MBD solution is well positioned to guide their users in that direction.

Next, Mr. Kelly focused on a new top-down design capability called SOLIDWORKS Treehouse. Users can use visual tools to create assembly structures at the beginning of design projects. As graphical hierarchies are created, the author can drop in specific, existing models that a designer must later position within that level of the assembly design. The author can also indicate if a 2D drawing is required at a given level within the hierarchy. In that way the product author can control and direct the overall product assembly design before actual detailed design begins. Mr. Kelly also explained that a user can go from a SOLIDWORKS detailed assembly back to the Treehouse graphical view in order to get an overview of the product design. Treehouse is included in all SOLIDWORKS packages. CIMdata welcomes the Treehouse enhancement as providing SOLIDWORKS users a tool that promotes top-down design methodology. Users will benefit by being able to preplan and structure complex assemblies before actual detailed design work begins.

Increased performance is gained by a reduced file size for SOLIDWORKS parts. SOLIDWORKS 2015 will now compress models by up to 50% for file storage. One restriction that is introduced, however, is that the previous release, SOLIDWORKS 2014, will not be able to open SOLIDWORKS 2015 files. For those interested in a more extensive list of enhancements available in Dassault Systèmes' SOLIDWORKS 2015, see the Internet site [http://www.solidworks.com/launch/documents/sw2015\\_launch\\_topten\\_eng.pdf](http://www.solidworks.com/launch/documents/sw2015_launch_topten_eng.pdf). CIMdata was pleased to see the strong enhancements included in SOLIDWORKS 2015 after the past two years of less robust improvements due to the drain of development work on the SOLIDWORKS Mechanical Conceptual solution. SOLIDWORKS users will gain a strong boost in their productivity from the new capabilities.

The future product, SOLIDWORKS Industrial Conceptual, a first sneak peek shown at SOLIDWORKS World 2014, was demonstrated and discussed. Built on Dassault Systèmes' 3DEXPERIENCE platform, the new product targets upfront industrial design. While specific details are incomplete until its formal release, CIMdata recognizes the notable ease of use that the SOLIDWORKS team has implemented within the product. The product's standalone collaborative cloud-based solution could well draw future interest from non-SOLIDWORKS users. In addition, the positioning of SOLIDWORKS Industrial Conceptual, and its sibling SOLIDWORKS Mechanical Conceptual, puts to rest the largest concern raised in the SOLIDWORKS user community when SOLIDWORKS Mechanical Conceptual was first released. At first it was thought to be a future SOLIDWORKS replacement; now the two conceptual solutions are clearly positioned upfront in the product development workflow before detailed design takes place within SOLIDWORKS proper. However, we remain concerned that data from the conceptual products is not fully compatible with SOLIDWORKS.

CIMdata views the improvements made to SOLIDWORKS 2015 and the expanded solution portfolio as important advances for the SOLIDWORKS user community. Users can leverage the Dassault Systèmes' 3DEXPERIENCE capabilities for collaboration and search—including graphical search. With SOLIDWORKS 2015 working together with conceptual design for front-end ideation, electrical design, simulation, inspection, and model-based definition for downstream manufacturing, users are assured of moving forward with a highly competitive suite of tools.

### **About CIMdata**

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