

# Imagine: Bringing SOLIDWORKS Users to the Cloud

*3DEXPERIENCE World 2023*

## Key Takeaways

**3DEXPERIENCE** World brings together a global community of industrial practitioners to learn, engage, share knowledge, and drive innovation around the **3DEXPERIENCE** Works portfolio and the SOLIDWORKS ecosystem.

Over the last several years, Dassault Systèmes has focused on helping the SOLIDWORKS user base leverage their vast portfolio through adoption of the **3DEXPERIENCE** platform on the cloud.

The event highlighted innovations from the company and their many customers, from startups to global enterprises, who are increasingly leveraging the **3DEXPERIENCE** Works portfolio.

Two offers announced during the event should drive further adoption of that portfolio.

CIMdata attended the **3DEXPERIENCE** World event in Nashville, TN on February 13-14, 2023. This was a return to an in-person event for the first time since 2020 and the energy in the crowd showed just how happy everyone was together in real life. Approximately 4,100 attended the event in person, with another 10,000+ expected to join online. The event offered over 100 sessions and over 30 hours of live content streamed to a global audience.<sup>1</sup>

For many years, this event was named SOLIDWORKS World, with a focus on the SOLIDWORKS portfolio. But over the last decade that portfolio has expanded significantly through both organic development and acquisitions. It has also grown by making intellectual property (IP) from other parts of Dassault Systèmes business available to SOLIDWORKS users. This makes sense because while design is critical, many SOLIDWORKS-using businesses have solution needs across the lifecycle that can greatly benefit from Dassault Systèmes IP and expertise. Part of supporting this evolution requires making the technologies more consumable by average users, in effect “democratizing” access and effective usage through their delivery on the **3DEXPERIENCE** platform. This is a challenge in that the average SOLIDWORKS installation has only a handful of users and only 10-15% of those have adopted data management solutions. One way to encourage adoption is to highlight the additional business value that the platform can bring. While the many breakout sessions focused on the “bread and butter” of design using SOLIDWORKS, the main stage content mainly focused on how the platform is providing additional business value today for a succession of Dassault Systèmes customers.

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<sup>1</sup> Travel and/or other expenses related to this commentary were provided by Dassault Systèmes.

Mr. Jamie Siminoff, the CEO, Founder & Chief Innovator for Ring, shared his journey from one man with an idea in his garage to a 1,300+ person company with hundreds of millions of dollars in revenue. While innovating in his garage more than a decade ago he realized that the garage workspace was too far from his front door (and its doorbell). Being an inveterate tinkerer, he created a video doorbell using Wi-Fi dubbed the DoorBot in 2011. Pictures showed SOLIDWORKS running on a desk in the corner of the overstuffed garage. Today his company relies on the **3DEXPERIENCE** platform and is known as a home security company with a mission to “make neighborhoods safer.” In his remarks he discussed how it is not just about the product but what it does. While he emphasized today’s mission as home security that was not the real genesis of the idea. It was about being able to answer the doorbell. In a press Q&A session at the event, CIMdata asked Mr. Siminoff about how the step from doorbell to neighborhood security pioneer actually occurred. In fact, it was a comment from Mr. Siminoff’s wife about feeling safer with the DoorBot installed that started his innovation wheels turning to home and neighborhood security. In an interesting side note, Mr. Siminoff said that he includes his email on every box. While some thought him crazy, he insisted that having this direct channel from customers was extremely valuable to keep him connected with their realities.

Mr. Salvadore Garcia, Chief Revenue Officer of Ocean-Based Climate Solutions, spoke about their innovative approach to carbon sequestration, a key technique to help humankind limit the impacts of carbon emissions on climate. Since about 50-80% of the oxygen we breathe comes from phytoplankton in the ocean they chose to focus on enhancing the growth of those critical organisms. A graphic shown during his remarks highlighted their approach. The “midnight zone,” deep seawater lower than 1,000 meters, is where significant amounts of carbon are naturally sequestered. The “twilight zone” between 200 meters and 1,000 meters is rich with nutrients that have no way of getting to the “sunlit zone” above 200 meters deep where the sun can power photosynthesis in the phytoplankton to generate oxygen and trap carbon. The company relied on the **3DEXPERIENCE** platform since early in development of their innovative solution: using wave energy to operate pumps that bring nutrients from the twilight zone into the sunlit zone. Their approach also includes measuring the degree of sequestration which allows them to create carbon credits that can be sold to other organizations to help them meet their own climate goals. This novel solution can be scaled up to provide more benefits more broadly.

Also getting main stage time was Dr. David Hoganson from Boston Children’s Hospital. A former engineer now a pediatric cardiac surgeon, Dr. Hoganson spoke about how his surgical teams are benefiting from the **3DEXPERIENCE** platform and Dassault Systèmes long-time investment in the Living Heart program, a collaborative research effort to leverage their design and simulation offerings to better understand the innerworkings of the human heart. In Dr. Hoganson’s case, those human hearts are often no bigger than a walnut in his patient’s undergoing life-saving surgery in their first week of life. He described how his team uses the platform to create patient-specific heart models from CAT and MRI scans, and then uses these models to more fully prepare for the challenging surgeries ahead. Current practice relies on the knowledge and improvisation skills of the surgeon. By using patient-specific data, they can plan the surgery and scale patches used to repair holes in the cardiac tissue to 98% accuracy. They also use lasers in the operating theater to outline the anatomy correctly right on the patient during the operation. This work is amazing and shows the power of bringing digital technology from one domain to another.

Dassault Systèmes leverages cloud infrastructure in several ways for the benefit of the SOLIDWORKS community as shown in Figure 1. Users of the on-premises software can access the **3DEXPERIENCE** platform through the Collaborative Designer for SOLIDWORKS offering that provides cloud-based product data management (PDM) capabilities. **3DEXPERIENCE** SOLIDWORKS lets users access

SOLIDWORKS through the platform and employ SOLIDWORKS Connected functionality.<sup>2</sup> SOLIDWORKS Cloud is a bundle of cloud-native capabilities that includes 3D Creator for parametric design and 3D Sculptor for freeform design.<sup>3</sup>

From the main stage, Mr. Gian Paolo Bassi, Senior Vice President and lead for **3DEXPERIENCE** Works, the moniker for solutions that bring the power of Dassault Systèmes portfolio to the SOLIDWORKS community, made two major announcements. Both should help expand the adoption of the **3DEXPERIENCE** platform within the SOLIDWORKS community. After July 1, purchasers of SOLIDWORKS will have more ready access to cloud services supporting data management and collaboration from the **3DEXPERIENCE** platform. If they pay two years of maintenance at the time of purchase, they will be able to use Collaborative Designer for SOLIDWORKS, an offering that includes:

- The **3DEXPERIENCE** Connector for SOLIDWORKS, which provides SOLIDWORKS cloud product data management (PDM) capabilities from within the SOLIDWORKS application. This out of the box (OOTB) cloud-native solution removes the information technology (IT) overhead of data management which can be particularly challenging for the small companies that are a large percentage of SOLIDWORKS customers.
- The Collaborative Industry Innovator role which supports collaboration on assets like designs and documents that are managed on the platform.<sup>4</sup>
- 3DSWYMer, a role that provides access to 3DSWYM, Dassault Systèmes' social collaboration offering for communication and threaded discussion in a managed environment. This includes a number of widgets to support dashboard configuration.



Figure 1—Bringing SOLIDWORKS Users to the Cloud  
(Courtesy of Dassault Systèmes)

Existing SOLIDWORKS customers can get these new capabilities by paying an additional \$300 for a higher maintenance tier.<sup>5</sup> SOLIDWORKS users taking advantage of these offers will get 25GB of platform storage.

<sup>2</sup> "SOLIDWORKS Connected provides access to all the 3DEXPERIENCE services and apps that you are entitled to use based on your role. This offering installs a full version of the SOLIDWORKS application on your computer from the 3DEXPERIENCE platform".

[https://help.solidworks.com/2023/english/SWConnected/swdotworks/c\\_get\\_started\\_3DX\\_platform.htm](https://help.solidworks.com/2023/english/SWConnected/swdotworks/c_get_started_3DX_platform.htm).

<sup>3</sup> <https://www.solidworks.com/how-to-buy/solidworks-cloud-offer> lists the full set of offerings in SOLIDWORKS Cloud.

<sup>4</sup> <https://www.solidworks.com/product/collaborative-industry-innovator>

<sup>5</sup> Note that this is pricing for US-based customers that will be different in different regions. This \$300 payment offers access to capabilities that would normally cost \$1500 if licensed separately.

This is an exciting offer that should help bolster efforts to increase platform adoption in the SOLIDWORKS community.

The second announcement is that starting July 1, 2023, all users with a **3DEXPERIENCE** Cloud license will be able to provide free access to the Collaborative capabilities of the 3DEXPERIENCE platform to anyone of their choosing, at no additional charge. Reducing monetary friction to such value chain collaborations is critical to adoption and highlighting the value that such collaboration can bring.

## Conclusion

This is but a small sample of the content available at **3DEXPERIENCE** World 2023. The breakouts offered deep dives into new functionality, customer presentations, and much more. Known as an excitable bunch, the SOLIDWORKS users in attendance did not disappoint, rushing toward the main stage to cop front row seats to hear the latest news about their favorite solution.

Dassault Systèmes, like many other technology providers, is all in on the cloud, including buying their own cloud infrastructure provider, Outscale, in 2017.<sup>6</sup> Offering the **3DEXPERIENCE** platform on the cloud gives them the perfect vehicle to democratize access to their vast portfolio of IP that supports the product lifecycle from idea through life. Democratization is key because much of their technology was designed for power users who often have specialized expertise which may be in short supply within SOLIDWORKS customers. Based on the presentations and exhibition floor the company has made significant progress on democratizing the technology with a consistent user experience. The offerings appear to be ready, now it is time to ramp up adoption. They have made some gains in that regard and clearly think that the new offers announced during **3DEXPERIENCE** World 2023 will entice more customers and prospects. They just might be right.

## About CIMdata

CIMdata, an independent worldwide firm, provides strategic management consulting to maximize an enterprise's ability to design, deliver, and support innovative products and services by identifying and implementing appropriate digital initiatives. For forty years, CIMdata has provided industrial organizations and providers of technologies and services with world-class knowledge, expertise, and best-practice methods on a broad set of product lifecycle management (PLM) solutions and the digital transformation they enable. CIMdata also offers research, subscription services, publications, and education through certificate programs and international conferences. To learn more, visit [www.CIMdata.com](http://www.CIMdata.com) or email [info@CIMdata.com](mailto:info@CIMdata.com).

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<sup>6</sup> <https://investor.3ds.com/news-releases/news-release-details/dassault-systemes-acquires-majority-stake-outscale>