

### THE SOLIDWORKS CONNECTOR ON THE 3DEXPERIENCE PLATFORM SEAMLESS AND SIMPLE



### PDM LOOK AND FEEL



### WITH **PLM** BENEFITS

### THE SOLIDWORKS CONNECTOR ON THE **3D**EXPERIENCE PLATFORM

Congratulations, you've decided to pursue Product Lifecycle Management (PLM), which can yield powerful rewards. Organizing development processes across the supply chain cuts time to market. Exposing product data and information across the enterprise empowers smarter and faster decisions. Collaborating in real time lets everyone across teams, departments, and continents work off the same page. Moving forward with PLM is a commendable step to improve a company's execution of product development.

Whenever PLM is being pursued, Product Data Management (PDM) also needs to be considered. Many design teams have used PDM systems for years to track, manage and control the creation of 3D models, drawings, toolpaths and much more. They have established practices for using PDM in their processes. While the pursuit of PLM can deliver great value for the company, many design teams are already reaping strong benefits from their existing PDM system. As organizations look to adopt PLM, the goal is to preserve engineering's present design IP within the existing system. For users of SOLIDWORKS, there is a readily available solution that achieves both goals: The Dassault Systèmes SOLIDWORKS Connector for the **3DEXPERIENCE** platform. Built by the same developers who created Enterprise PDM (ePDM) utilized by thousands of users, The SOLIDWORKS Connector on the **3DEXPERIENCE** platform provides a user experience virtually identical to the EPDM user experience thus avoiding a serious disruption in the design management and practices used today. Overall, its unobtrusive user interface, familiarity for SOLIDWORKS users, and quick installation make it the natural choice when you're ready to make the move up to PLM.

Ultimately, this eBook provides more information on the traditional challenges of changing over from CAD focused PDM to an enterprise-serving PLM system. It details how the **3DEXPERIENCE** platform supports SOLIDWORKS workgroups. And finally, it offers insight into how the **3DEXPERIENCE** platform manages SOLIDWORKS data in context with next generation design tools such as Mechanical Conceptual and Industrial Conceptual for future-proof data management.

Too often, the adoption of PLM can deliver great value for the company, but introduces changes to the design team's PDM system. With the **3DEXPERIENCE** platform managing SOLIDWORKS, you simply don't have to make that compromise.

WILL CENTRALIZED MANAGEMENT OF ALL CAD FILES GLOBALLY EVER BE A REALITY?

IT IS A REALITY NOW —SOLIDWORKS CONNECTOR ON THE **3D**EXPERIENCE PLATFORM<sup>®</sup>.



## THE TRADITIONAL CHALLENGES OF MANAGING CAD WITH PLM

For most companies, adopting a PLM system translates into a change in how design manages their CAD data and other information. This affects design productivity in two tangible ways. Traditionally, it represents a difference in how the CAD users interact with the PDM system, introducing a new learning curve. But furthermore, PLM exposes much more functionality than PDM does, requiring CAD users to hunt and peck for the capabilities they use frequently.

#### CHANGING THE DATA MANAGEMENT PARADIGM

Practically all of today's PLM systems offer data management capabilities to check-out / check-in CAD models and drawings, to manage design iterations and to control access rights through web browsers. However, that is not the extent of these capabilities in PLM systems. They embrace enterprise data management, where any department can store their product-oriented data and information as well. This is tremendously beneficial to the company overall as all product-oriented documents and information are interconnected and related, representing a single source of truth for all departments.

CAD users, however, are accustomed to a different experience. Their CAD application is frequently the client that connects to a PDM server. Tuned to specific CAD formats, these systems not only understand models and drawings created by CAD applications, but are highly responsive and mimic the file systems of their own desktops. With almost all PDM functionality accessed through their CAD application, users rarely ever enter the PDM system.

As such, using a web browser to directly access PLM data management capabilities outside of the CAD application and desktop represents a change to a user's day-to-day routine.

#### OVERWHELMING THE CAD USER WITH PLM

Alongside data management capabilities, PLM systems provide a wide range of other functionality. They offer workflows and automated tasks to drive the completion of processes, and automatically generate reports and tracking mechanisms to enforce compliance to regulations and standards. PLM systems deliver capabilities to break down requirements and allocate them to items in Bills of Materials. The list of functionality that PLM provides doesn't end there.

While this world of capabilities delivers quantified value to companies, design teams typically use a small set of this functionality. For users of CAD, who simply want to check their work in and out every day, exposure to all that functionality for the enterprise can be overwhelming. Specialized users, like those of CAD applications, want shortcuts to the tools that are directly relevant to them. Everything else is a distraction.

Ultimately, PLM is great for the company, but can be a lot more than needed for CAD users. That is something design teams and companies can ill afford.

#### **ATTENTION DESIGNERS:**

Effortlessly access, manage and share SOLIDWORKS data without leaving your preferred environment

Access enterprise process workflows, increase data integrity and improve configuration management

Collaborate with all stakeholders in your design development through the enterprise directly from the SOLIDWORKS interface



## **SOLIDWORKS**

The **3DEXPERIENCE** platform powers Dassault Systèmes' suite of innovation solutions, enabling a large range of business processes while providing dedicated tools for IT professionals. The **3DEXPERIENCE** platform offers a world of capabilities for enterprises, but it also provides data management capabilities tailor made for SOLIDWORKS users.

#### MINIMALIST INTERFACE

When users first see the SOLIDWORKS Connector, it takes them some time to realize they are utilizing data management capabilities within the context of an enterprise PLM system. That's because the **3DEXPERIENCE** platform's capabilities to manage SOLIDWORKS models and drawings are integrated into the file system of their desktop maintaining a familiar paradigm. Users can simply save their files to the hard disk, much like they are managing the files manually. Though, there is a lot happening behind the scenes.

#### **AUTOMATED INTELLIGENCE**

As you change and then save your SOLIDWORKS models and drawings, the files are tagged. The **3DEXPERIENCE** platform tracks this activity on your desktop, synchronizing it with the server as necessary. As a result, it knows which files are changed or out of date with the central vault.

Furthermore, as new SOLIDWORKS files are dropped onto the desktop, like a model emailed to you from a supplier, the **3DEXPERIENCE** platform provides confirmation through the file system of which files are checked-in to the **3DEXPERIENCE** platform and which ones are local. All that information is presented through your Windows Explorer.

Additionally, users can select SOLIDWORKS files on their desktop and then use the right mouse button to access a range of **3DEXPERIENCE** platform data management specific functionality, just as if it were another Windows command.

The **3DEXPERIENCE** platform has a wide range of capabilities useful to the enterprise. However, the minimal set of data management functionality that SOLIDWORKS users utilize frequently is delivered in a simple and familiar way. They aren't overwhelmed. The organization doesn't have to compromise between enabling the enterprise or design.

### IMPROVE DESIGN CONTROL AND BUSINESS PROCESS MANAGEMENT TO REALIZE **TRULY FUNCTIONAL PRODUCT DEVELOPMENT AND DELIVERY**



## FUTURE-PROOFED DATA MANAGEMENT

Enabling the company with PLM capabilities without sacrificing the productivity of SOLIDWORKS users is critical. However, that isn't the only consideration to take into account. Dassault Systèmes is launching innovative new **3DEXPERIENCE** apps that combines design and enterprise workflows. This elevates design IP directly into the enterprise processes and eliminates redundant loops such as review processes that pass through design and then independently pass through marketing as a separate process.

#### **FUTURE SOLUTIONS**

In the past year, Dassault Systèmes has released two apps in the **3DEXPERIENCE** platform specifically for design and engineering: SOLIDWORKS Conceptual Designer and SOLIDWORKS Industrial Designer.

SOLIDWORKS Conceptual Designer provides an instinctive, social and connected modeling environment focused on conceptual design. SOLIDWORKS Industrial Designer provides a similar modeling environment tailored for aesthetic design. These two offerings deliver powerful next generation tools help increase productivity and make better design and engineering decisions.

#### DISTRIBUTED DATA MANAGEMENT

From a data management perspective, the models and designs created by SOLIDWORKS Conceptual Designer and SOLIDWORKS Industrial Designer are important footprints along the way to a fully detailed design in SOLIDWORKS. They need to be tracked, managed and controlled, just like any 3D model in SOLIDWORKS.

This is where the SOLIDWORKS Connector on the 3DXERPIENCE really delivers. Even though Conceptual Designer and Industrial Designer are both cloud apps, where designs are created in the Cloud, ENOVIA can still directly manage their deliverables. And interestingly, it can do so while also managing your SOLIDWORKS files on your desktop.

All in all, the **3DEXPERIENCE** platform is a safe and secure investment. If your organization decides to move slowly, quickly **3DEXPERIENCE** offerings, rest easy, knowing that the **3DEXPERIENCE** platform can manage it all.

Keep your PDM user experience and add the power of PLM to your design processes.

Bring design IP seamlessly to users and decision-makers throughout the enterprise in real-time with design development.

Let the **3D**EXPERIENCE platform to enable the power of your enterprise in design development from day one.

# SUMMARY AND CONCLUSION

The pursuit of PLM is well worth the effort. Companies utilizing PLM are improving their product development efforts with quantifiable results. But along the way, it is important to take data management considerations into account, especially in the context of design & engineering productivity.

#### THE TRADITIONAL CHALLENGES OF MANAGING CAD WITH PLM

The data management capabilities of PLM are often manually accessed through web browsers, yet PDM is often invisible to CAD users as they access them directly through their CAD applications. Furthermore, PLM offers a wide range of capabilities, yet only a limited set of data management functionality is used very frequently by CAD users. These two realities can undermine the productivity of CAD users when they start to use PLM for data management.

#### THE CONNECTOR FOR SOLIDWORKS

Developed by the same team that created ePDM, the Connector for SOLIDWORKS delivers just the right data management functionality in a simple and familiar interface. It is directly integrated into the desktop and SOLIDWORKS interface, completely removing the need for users to learn a new way to do what they've done for years: manage their models and drawings quickly and easily.

#### SATISFYING YOUR DATA MANAGEMENT NEEDS, TODAY AND TOMORROW

While many organizations adopting PLM struggle with transitioning their design team to the new platform, SOLIDWORKS users are unusually fortunate. The Connector for SOLIDWORKS eliminates the disruption commonly associated with the transition to PLM by providing a simple and familiar interface for data management. Overall, the message is simple: You don't have to compromise your designer's productivity with CAD to reap the value that PLM can provide.

### Our **3D**EXPERIENCE<sup>®</sup> platform powers our brand applications, serving 12 industries, and provides a rich portfolio of industry solution experiences.

Dassault Systèmes, the **3DEXPERIENCE**<sup>®</sup> Company, provides business and people with virtual universes to imagine sustainable innovations. Its world-leading solutions transform the way products are designed, produced, and supported. Dassault Systèmes' collaborative solutions foster social innovation, expanding possibilities for the virtual world to improve the real world. The group brings value to over 190,000 customers of all sizes in all industries in more than 140 countries. For more information, visit **www.3ds.com**.



**3D**EXPERIENCE



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