Processes are often not yet consistently carried out in Product Lifecycle Management (PLM) – it’s not uncommon to find gaps at different places between systems, document formats and devices, which can make processes costly and error-prone. With the mapping of document-based design and business processes in Teamcenter by Siemens PLM Software, there can arise for example in different places gaps between systems, document formats and devices, making these processes costly and prone to error. In spite of these demands, document management and distribution for Teamcenter is currently still somewhat unexplored territory. The Output Management specialists of Seal Systems AG are among the first providers to have specialized in this topic. With “Document Output Center for Teamcenter” they offer an entire product suite for businesses to use in Teamcenter. Dr. Uwe Fetzer, Director of PLM Solutions, explains which approaches for document security, document processing and document distribution are found behind the solution “DOC4TC”.

SEAL Systems offers a solution with which businesses can process files and documents in Teamcenter, automated and together with further business processes. Image: iStock
**PLM IT Report: With “Dispatcher”, Siemens PLM Teamcenter has its own methods for distributing documents. Which advantages does an output management system offer to businesses currently seeking to tackle these processes with tools from Siemens PLM Teamcenter?**

Dr. Fetzer: In contrast to Dispatcher, which is included in Siemens PLM Teamcenter, DOC4TC offers a series of benefits for the output and conversion of documents with Teamcenter Dispatcher, as a complete output management suite. Users benefit - in brief - from the following features: a fully integrated search and collection function, continuous use of meta data for document guidance, far-reaching processing and editing functions, central, high-performance administration and monitoring tools, intelligent printing and plotting management, and automated processes. The production standard involves no additional programming effort with frameworks or application interfaces.

**PLM IT Report: What features can users expect?**

Dr. Fetzer: DOC4TC is not only for project-specific customizing of Teamcenter installations. It capitalizes on Teamcenter’s UA architecture. Our goal is to optimize all document-based business processes in Teamcenter. For this there are many possible entry points: a number of business processes in and around PLM require documents such as drawings, forms, documentations and lists, filed and managed in Teamcenter at different places and in different forms.

**PLM IT Report: How exactly is this feature implemented?**

Dr. Fetzer: First, integrated, standardized proceedings are fed once through in Teamcenter for the process-oriented collection of documents from objects and/or structures. Downstream these documents can be converted, furnished with watermarks or stamps, and finally printed, plotted and electronically distributed, in any format you need. The benefit is, that the right documents are always provided in the right format to the right location, automated and error-free. Moreover the documents are always reliably provided with all necessary meta information such as status, version, origin and signatures. The sorting, according to the structures existing in Teamcenter, is guaranteed with print or output as data.

All this happens - naturally according to your preferences - in the background without further intervention, for both single documents as well as for comprehensive document lists. In summary: Businesses have automated processes for integrating Teamcenter-managed files and documents in further business processes.

**PLM IT Report: Especially large projects need a controlled and traceable exchange of a large amount of information and documents – experts refer to this as transmittals. Does the Document Output Center also offer solutions for these demands?**

Dr. Fetzer: Whether by e-mail and zip files, FTP access, web portals or printed on paper – the many ways to carry out distribution of documents is manifold and can be adapted to existing processes. With the TC Integration Document Distribution Plattform (DDP), predefined distribution orders can be automated in a template beforehand. Such an order automatically compiles documents for the transmittal of certain receiver groups, carries out format conversions, creates directories of contents with the data of the documents to be...
distributed and bundles everything together into a delivery package. Depending on the distributor (project groups of customers or suppliers) electronic delivery can then be carried out in the desired format. The confirmation of receipt of the document package is deposited as proof and notification in Teamcenter. This makes distribution processes transparent, replicable, and traceable.

**PLM IT Report:** You’ve mentioned publishing processes or documentation which is created on the basis of compiled data, and which must simultaneously guarantee an automated, error-free workflow with high-quality output...

Dr. Fetzer: When self-created documents are to be compiled with materials delivered from suppliers into new documentation sets, such as user instructions or product information, DOC4TC can be expanded into a publishing solution. The documents used are those deposited into the structure or over the Content Management Module from Teamcenter.

Downstream modules then prepare the collected documents into a full, structured documentation set. Along with the above processing steps, this comprises the arranging of the single documents into a documentation set, adapting the documentation set to the desired customer layout, creating a directory of contents, and adding hotpots/bookmarks with corresponding links. Various output formats can be generated after completion of the whole structure. Paper output, PDF output or web output is possible here according to need.

**PLM IT Report:** A word about scalability in regard to modular solutions architecture. Do you also offer individual solutions elements for specific requests?

Dr. Fetzer: First, our standard product provides a full range of features, which at the same time is designed for optimal adaptability to customer-specific use scenarios and processes. Even if different modules might have to be combined for the implementation of a customer demand, customer-specific or subject-specific partial solutions are absolutely possible. For example, just one server-based conversion workflow can be undertaken for certain format conversions, without implementing printing or plotting management or other processing methods. The solution is scalable both in the functional range as well as in dimension relative to volume. -sg-