OSRAM CONTINENTAL RELIES ON DATA EXCHANGE FROM THE CLOUD

By Nadi Sönmez

Setting up an IT landscape from scratch is a challenge, but at the same time it offers an opportunity to do things completely differently. OSRAM Continental took advantage of this opportunity and moved its entire IT infrastructure to the cloud. The two-year-old joint venture uses PROSTEP's cloud-based data exchange service to exchange product data with customers and suppliers.

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Intelligently networked lighting that automatically adapts to the driving situation and improves communication between the driver, the vehicle and the environment is the future of automotive lighting. OSRAM Continental's mission is to shape this future. The joint venture between OSRAM and Continental was set up in the middle of 2018, with each company holding a 50-percent stake. It combines the expertise and experience of the two parent companies in the fields lighting, electronics and software.

With a workforce of 1,500, the joint venture develops, manufactures and markets solutions for front and rear headlights, individually controllable interior lighting, and innovative projection systems that provide greater driving safety and comfort. In the future, they will play a key role – especially when it comes to the safety of autonomous driving. Networked light control units that link the different sensor signals from a vehicle with information from other vehicles or the environment provide the basis for this type of intelligent lighting concepts.

OSRAM Continental is headquartered in Munich and maintains a presence at 15 locations in nine countries worldwide. Product development is distributed over Europe, America and Asia, with the largest European development site situated in Iaşi, Romania. The mechanical engineers work primarily with CATIA, but they also use other CAD systems that are connected to the PLM solution SAP PLM via SAP ECTR depending on the project and customer requirements involved. Most of the applications run in a virtual desktop infrastructure, i.e. only views are streamed to the users' screens.

STATE-OF-THE-ART IT INFRASTRUCTURE

„With the exception of a few applications, everything runs in the cloud. We wanted a state-of-the-art IT infrastructure," says Catalina Man, Team Lead IT Operations at OSRAM Continental and, together with her team, responsible for providing support to OpenDXM GlobalX users, among other things. „The biggest hurdle encountered on the way to the cloud was changing the employees' mindset. We had to convince them that cloud services work just as well as solutions that are installed locally. The issue of security was also a challenge. It can't be left to the cloud provider alone but instead requires a team that concerns itself with the network and infrastructure. The limited human resources available to support the cloud environment were therefore another challenge."

In line with its general cloud strategy, OSRAM Continental decided to use the OpenDXM GlobalX data exchange platform from the cloud. As Catalina Man says, there were a number of reasons for choosing PROSTEP's SaaS solution. „We needed a solution for all the locations that could be implemented quickly and which we could use to securely exchange not only CAD files but also, for example, product marketing videos. We wanted to work with well-known providers, and we were familiar with PROSTEP from our parent company Continental. We also knew that the company offered its data exchange platform from the cloud and then discussed our requirements. It ended up that OpenDXM GlobalX was the best fit for us because the software is very flexible and can be implemented quickly."

The SaaS solution is installed in the cloud infrastructure provided by the DARZ data center in Darmstadt, which has been certified by the Federal Office for Information Security (BSI) in accordance with CIP (Critical Infrastructure Protection) and meets all the requirements stipulated within the framework of DIN/ISO 9001 and 27001 and the European General Data Protection Regulation (GDPR). With its state-of-the-art architecture, infrastructure and building technology, DARZ ensures the highest possible level of protection and availability of data. Catalina Man confirms that all OSRAM Continental's locations access the cloud infrastructure provided by the Darmstadt data center directly via the Internet and that response time behavior is good.

INTEGRATION OF AN OFTP APPLICATION

The SaaS solution is multi-client capable and is also used as a multi-tenant application by numerous other customers. OSRAM Continental, however, decided on their own instance as it exchanges large volumes of data with carmakers using the OFTP2 protocol. Which is why PROSTEP integrated T-Systems' OFTP application rvsEVO in the customer's data exchange service. It automatically prepares the data to be exchanged for OFTP2 communication when the corresponding recipients are selected. However, it can only be used in combination with a private cloud or a cloud of its own for data protection reasons and due to technical restrictions.

Aside from the OFTP integration, users can use the SaaS solution practically „out of the box", which makes updates easier. „The software supported almost all our use cases from the word go," says Catalina Man. PROSTEP implemented an important adaptation for OSRAM Continental that has already been incorporated in the standard application. The size of the WebSpaces for individual users and user groups can be defined individually within the storage quota for the licensed number of users and can also be changed. This was previously technically feasible but had to be performed by PROSTEP support staff. Now customer administrators can do this themselves using the intuitive web interface.

Approximately 250 internal and almost 100 external users are currently registered as exchange partners at OSRAM Continental. The internal users are primarily R&D engineers, but an increasing number of employees from other departments are also sending and receiving sensitive data securely via the cloud platform, which logs all exchange processes in a way the ensures they can be traced. The solution has registered over 6,000 uploads and downloads involving a data volume of more than 500 gigabytes this year alone.

INTUITIVE WEB INTERFACE

All key data exchange functions are made available to users via an HTML5-based web interface. With the help of external user interface design specialists, PROSTEP has made this interface more intuitive and ergonomic so that even occasional users can use the application without the need for regular training courses. „The new interface has made the application much easier to use," says Catalina Man. „At first users had a lot of questions, which is why we worked hard to ensure that they understand the tool and feel comfortable using it. We asked PROSTEP to expand existing documentation to include easy-to-understand explanatory videos for example."

Although the data exchange service is primarily used by developers, OSRAM Continental has not integrated the SaaS solution directly in its PLM environment even though this is technically feasible. „We decided to first make sure that the application is stable for the users," says Catalina Man. Engineers normally export their CAD data from SAP PLM or SAP ECTR to an appropriate directory, log in to OpenDXM GlobalX using the Web Client, select the files to be exchanged and the respective recipient, and upload them to the platform. Both the files and the exchange processes are encrypted, thus ensuring a high level of security.

Employees who like working with MS Outlook and use it extensively can now initiate data exchange directly from their e-mail program. At the beginning of this year, OSRAM Continental activated the Outlook integration – which is actually a multi-cloud integration because the Office programs run in a different cloud environment – for certain users. Catalina Man says that although connecting across cloud boundaries isn't a problem, it requires the installation of additional software on the PCs, which is why most users cannot install the integration themselves.

FALLING TOTAL COST OF OWNERSHIP

The main benefit of the SaaS model for OSRAM Continental is the fact that the company did not have to deal with purchasing and implementing hardware and software. This meant that the data exchange solution was able to go live quickly. It can be scaled up or down as the number of users increases or decreases. No or significantly fewer IT administration and support staff is required. Maintenance of the IT infrastructure and software updates are included in the price, which reduces the total cost of ownership or at least makes it easier to calculate. In a new company, where the entire IT organization has yet to be established, internal resources are scarce. A cloud-based, out-of-the-box solution is therefore the perfect solution.

„For me, the key advantage of the SaaS solution is its flexibility, which makes it possible to respond to new requirements quickly," says Catalina Man, who is very happy with the support PROSTEP provides and the quality of the support. Review meetings, at which the experts from PROSTEP explain new features and make note of new requirements, are held twice a year following the updates. „The team is very flexible and implements our requirements quickly," explains Catalina Man in conclusion. „That is crucial to the success of our collaboration."

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