



## CUSTOMER STORY

# Global Industry Leading Automotive Application Developer dSPACE Migrates from Legacy Requirements Management Platform to Jama Connect®

As part of a global modernization initiative, dSPACE partners with Jama Software® to migrate decades of data, increase collaboration, simplify compliance, and integrate processes across best-of-breed tools.

- **Founded:** 1988 in Paderborn, Germany (North Rhine-Westphalia).
- **Expertise:** Solutions for automotive applications, including autonomous driving, E-mobility, power trains, V2X and connected services, communication systems, body and comfort velectronics, and chassis.
- **Other Industries Served:** On- and off-road commercial vehicles, aerospace, energy, rail, marine, machinery & power tools, and academia.
- **Mission:** Enable technology and mobility pioneers to make life safer, cleaner, and easier.



dSPACE is one of the world's leading providers of simulation and validation solutions that are used for developing connected, autonomous, and electrically powered vehicles.

Mainly automotive manufacturers and their suppliers use the company's end-to-end solution range to test the software and hardware components of their new vehicles long before a new model is allowed on the road. dSPACE is not only a sought-after development partner in vehicle development, but engineers also rely on dSPACE's expertise in aerospace and industrial automation.

dSPACE's portfolio ranges from end-to-end solutions for simulation and validation to engineering and consulting services as well as training and support. With more than 2,400 employees worldwide, dSPACE is headquartered in Paderborn, Germany; has three project centers in Germany; and serves customers through regional dSPACE companies in the USA, the UK, France, Japan, India, China, Korea, and Croatia.



### Needs and Evaluation Criteria

- New, modern solution that supports Agile development
- Enhanced integration capabilities – particularly with Azure DevOps
- Improving user acceptance with a tool that met all stakeholder needs
- Ability to migrate data from IBM® DOORS® Classic without losing significant data

### Why dSPACE Chose Jama Connect®

- Ability to view items from a document and single-item perspective
- Wide range of robust functionality and maturity, namely: Configuration management, Live Traceability™, reviews, import, and export
- Ability to migrate data from DOORS without loss and reconstruct the data in an easier, more modern model
- Strong network of integrations enabled by Tasktop
- Easy administration
- Cloud-based software as a service (SaaS)

### Migration Objectives

- Transfer all legacy data from DOORS to Jama Connect
- Limit business disruption due to complex interdependencies
- Recreate the structure of data in Jama Connect to reduce complexity while ensuring no data loss

### Outcome and the Future

- Fits every team's individual needs – from simple to highly complex
- Strong cross-project collaboration
- Bi-directional data flow with Azure DevOps
- Cloud-based solution with flexible license model allows external partners and suppliers to participate in the same platform
- Out-of-the-box configurations and templates help dSPACE comply with key regulations and prepare for audits with less effort and time
- Ongoing partnership with Jama Software for best practices, configuration help, and training

As a rapidly growing, global company, dSPACE is continually looking for ways to stay ahead and optimize their development processes. As part of that initiative and with an overall goal to replace their legacy requirements management platform completely after migration, dSPACE set out to find a requirements management solution that could replace (in places) and co-exist (in other places) with IBM® DOORS®.

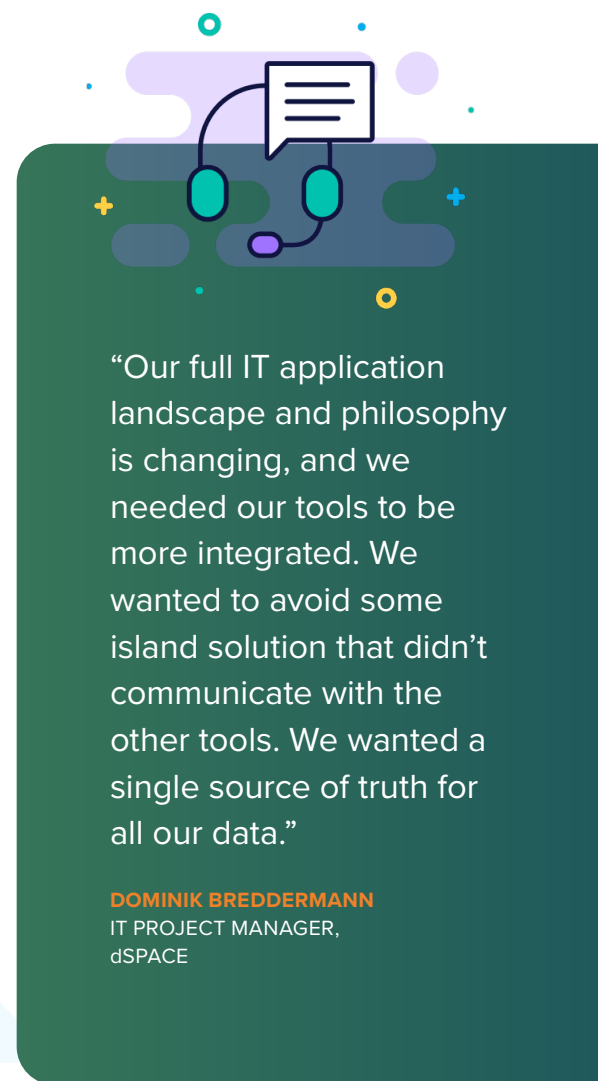
While DOORS has been a market leader for decades, and was initially onboarded at dSPACE in 2008, the team knew that their growth and ability to be agile required that they looked towards more modern solutions across their development landscape.

“One of the biggest pain points in DOORS was that it was configured in a way that was too complex, and it discouraged people from actually using the tool. Even though we were trying to continuously improve, it wasn’t much of an improvement for anyone,” said Dominik Breddermann, IT Project Manager at dSPACE.

“We were running into a problem where we had many different stakeholder groups with very different needs. Some teams were asking for a very simple solution, while other teams needed a solution that could handle high levels of complexity. It wasn’t feasible to continue with a legacy solution knowing that it would directly impact our user acceptance,” he continued.

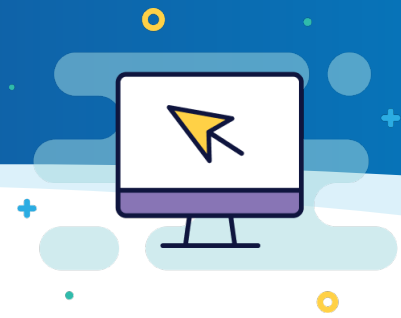
In the end, dSPACE determined that their new solution needed to meet the following criteria:

- New, modern solution that supports Agile development
- Enhanced integration capabilities – particularly with Azure DevOps
- Improving user acceptance with a tool that met all stakeholder needs
- Ability to migrate data from DOORS without losing significant data



“Our full IT application landscape and philosophy is changing, and we needed our tools to be more integrated. We wanted to avoid some island solution that didn’t communicate with the other tools. We wanted a single source of truth for all our data.”

**DOMINIK BREDDERMANN**  
IT PROJECT MANAGER,  
dSPACE



After a full market evaluation that first included the top seven requirements management organizations, the team was able to narrow their search down to just three organizations, with who they participated in a request for quote (RFQ) and request for plan (RFP).

Following careful consideration and a long process of evaluation and trials, dSPACE selected Jama Connect for variety of reasons, but namely for following reasons:

- Ability to configure the platform to fit their needs
- Full functionality with an easy-to-use interface
- Ability to migrate all DOORS data and preserve access to the data
- Cloud-based Software as a Service (SaaS)
- Full collaboration and visibility across all projects

“We were really searching for a flexible, modern, and powerful solution to fulfill our needs, especially when it came to integrating with Azure DevOps, and ensuring when we migrated our data from IBM DOORS to the new solution, we wouldn’t lose any of our data,” said Breddermann. “And Jama Connect met those needs and more.”

While Jama Connect checked all the boxes for complex and mature functionality – including configuration management, Live Traceability™, reviews, and import/export functionality – the team at dSPACE was pleasantly surprised at how easy it was for teams to get up and running quickly with little training. And while dSPACE was moving to a more modern solution, they recognized the importance of preserving and using the data that DOORS had collected for so long. Migration needed to be successful without significant data loss.

“Jama Connect is a powerful tool with a modern interface. What sets it apart from other modern tools is that it has complex functionality, but they make it as simple to use as possible. You don’t need expert knowledge to use the tool. With about four hours of training, our team was able to understand their migrated data and were able to go on with their day-to-day business.”

**DOMINIK BREDDERMANN**  
IT PROJECT MANAGER,  
dSPACE

“The migration aspect was very important to us. Some companies are able to start from scratch with a new requirements management tool, but in our situation, that wasn’t possible. We needed the content and its interdependencies to be preserved because it is still relevant to us. It’s not like every year we start a new project and say, ‘forget about the old data,’” Breddermann continued.

It was also important to the team that despite using the data from DOORS, they were not going to buy a new solution just to recreate the same outdated structure they had worked with in the past. And with Jama Connect, the DOORS documents (modules) do not dissociate after migration, even though Jama Connect is an item-oriented tool. The intrinsic views support the user reading and understanding migrated content. In other requirements management tools that’s not the case, and migrated documents decay into single items, and context from the document gets lost.

While the team’s initial criteria didn’t include finding a cloud-based SaaS solution – as it had been difficult for the company to get vendors to level up to their required data security – it became clear that cloud hosting would offer the dSPACE major opportunities and benefits.

“When we first started our search, we weren’t planning to have a cloud solution. However, we realized that with a cloud-based tool like Jama Connect, we could greatly reduce maintenance and support efforts,” said Breddermann.

Because of dSPACE’s breadth of products and industries – it was critical that the team would be able to have full visibility and collaboration across all projects.

“Not every tool in the market is able to support interdependencies and cross-project collaboration. Many tools that we evaluated looked great, and they really felt great, but they were too simple. You couldn’t depict all these interdependencies in the tool and with Jama Connect, you can,” said Breddermann.



“When Jama Software said they could offer us a cloud-hosted environment with a custom data processing agreement, we knew it would be a great option for us. They worked with us to meet all our necessary conditions.”

**DOMINIK BREDDERMANN**

IT PROJECT MANAGER,  
dSPACE



With several thousand DOORS modules and several hundred thousand DOORS objects that need to be migrated and available in Jama Connect, dSPACE knew they had their work cut out for them.

The team had the following objectives when they started migration:

- Transfer all legacy data from DOORS to Jama Connect
- Limit business disruption due to complex interdependencies
- Recreate the structure of data in Jama Connect to reduce complexity while ensuring no data loss

Though the work of migrating decades of DOORS data to a new solution was no easy task, they knew that Jama Software was there to help them every step of the way.

There was a multistep process to ensure the successful migration of the data while coinciding with the rollout of Jama Connect.

First, the current state of the existing projects in DOORS was determined and there was cross analysis of how the fields between modules were being utilized. Then, with the help of the Jama Software consultant, dSPACE weeded out any redundancy and created item types within Jama Connect to receive the data in a consolidated and standardized way.

During the first step of the migration, there was a focus on migrating a few key products that represented the different project types that were needed to bring over. Due to the complexity of how all dSPACE projects are interconnected, the team had several sessions with Jama Software consultants to determine a strategy for how these dependencies would be represented in Jama Connect, and an iterative approach to bringing projects over in waves rather was agreed upon, rather than trying to bring them all over at once.

To bring the data over successfully, there was a need for a collaborative approach between dSPACE and Jama Software consisting of:

- Some manipulation of the data first in DOORS using DXL scripting
- The export of the modules into ReqIF
- Transformation of the ReqIF output using custom scripting
- Import of the data using the Jama Connect Data Exchange
- Validation of the data in Jama Connect



After the success of the pilot products, dSPACE was able to bring over projects as they were ready to move. Regular communications took place between dSPACE and Jama Software to ensure continued success for any updates that were needed or adjustments to the strategy. Overall, the process was repeatable and manageable without too much support or intervention needed directly from Jama Software.

“Jama Software provided full adoption services and best practices guidance. They worked closely with us to guide us through developing the migration tool chain and fulfilling the needs of a typical large-scale DOORS to Jama Connect migration,” said Breddermann. “It was important for us to be able to migrate data from DOORS to Jama Connect in a way that we are able to depict the development data or interdependencies between all the development artifacts. We have been very happy with Jama Connect and the deployment process. We feel that we’ve been very well supported by Jama Software in identifying best practices and optimal configurations and feeling confident in our pilot projects and migrations.”





The dSPACE now has 400 users in Germany, France, Croatia, and India, and expect that number to rise to more than 500. Users span teams across the company and beyond, including software development, hardware development, testing, suppliers, and external partners.

Though they have only been using Jama Connect for a short time, they've already identified the following positive outcomes:

- Fits every team's individual needs – from simple to highly complex
- Strong cross-project collaboration
- Bi-directional data flow with Azure DevOps
- Participation from external partners and suppliers in Jama Connect
- Out-of-the-box configurations and templates help dSPACE comply with key regulations and prepare for audits with less effort and time
- Ongoing partnership with Jama Software for best practices, configuration help, and training

From the outset, the dSPACE knew that their teams had different needs, and they hoped to find one solution that could meet them all. With Jama Connect, they were able to accommodate the most complex projects, and the simplest. Not only that, but teams have full visibility into all past, present, and future projects, allowing for cross-departmental collaboration and alignment.

While dSPACE already has one product in Jama Connect that needs to be ISO 26262 (functional safety) compliant, they credit Jama Software with helping them easily manage audit preparation.

“With the pre-configured special item types and data models, Jama Software is helping us comply with ISO 26262 with much less work. The sample projects in our sandbox and the Functional Safety Kit have helped a lot,” said Breddermann.

## OUTCOME AND THE FUTURE (CON'T)

With Jama Software, they know they have a true partnership, whereas they felt that they might have been in a different situation had they chosen another solution.

“This was a huge advantage of going with Jama Software because other companies offer a good tool, but then you’re alone with it. Or you have to invest in finding a partner that can help you configure the tool or find a migration solution. It was great, and unique, that Jama Software provided these consulting services and configuration so that we had the opportunity to structure the data properly and feel confident in using the tool,” said Breddermann.

While dSPACE looks to expand to new markets and continue to be a global leader, they know that Jama Software will be there to help.

“We are a continuously growing international company that requires a modern, scalable tool landscape. It also requires tools that support easy access from anywhere in the world. Jama Connect is a big part of that.”



Jama Software® is focused on maximizing innovation success in multidisciplinary engineering organizations. Numerous firsts for humanity in fields such as fuel cells, electrification, space, software-defined vehicles, surgical robotics, and more all rely on Jama Connect® requirements management software to minimize the risk of defects, rework, cost overruns, and recalls. Using Jama Connect, engineering organizations can now intelligently manage the development process by leveraging Live Traceability™ across best-of-breed tools to measurably improve outcomes. Our rapidly growing customer base spans the automotive, medical device, life sciences, semiconductor, aerospace & defense, industrial manufacturing, consumer electronics, financial services, and insurance industries. To learn more, please visit us at [jamasoftware.com](https://jamasoftware.com).