

**CUSTOMER STORY** 

# FORT Robotics Selects Jama Connect® to Replace Google Sheets for Product Development:

Bolstering Efficiency, Streamlining Collaboration, Reducing Rework, and Turbocharging Audit Readiness



- FORT Robotics was founded in 2018 to build a first-of-its kind Robotics Control Platform to give robot builders and users safe, secure, and dynamic control of their machines.
- The company brings together leading industry technologists to address robotics' most complicated and dangerous aspects.
- FORT is trusted by businesses around the globe in various industries, including warehousing, agriculture, and construction, to maximize productivity while ensuring safety.
- The company is headquartered in Philadelphia.

### **CUSTOMER STORY OVERVIEW**

With a future focused on growing profitability, FORT needed a way to manage requirements within its product portfolio more efficiently. Existing tools, including Google Sheets, Confluence, and an Atlassian Requirements Plugin created potential risks, such as missing requirements and test coverage issues. The team was also frustrated by existing processes and wanted a user-friendly tool to integrate seamlessly with Jira.

#### **CHALLENGES**

- Tedious workflows related to writing, gathering feedback, and approving requirements
- Lack of backward and forward traceability
- Difficult-to-use platform that created a convoluted requirements management process

#### **EVALUATION**

- Sought a user-friendly requirements management tool that would save time and speed up processes
- Needed backward and forward traceability
- The new platform must integrate easily with other business-critical tools, such as Jira
- Required a tool that would support the company's growth and scalability goals

#### **OUTCOMES**

- Reduction of requirements approval time to minutes from weeks
- 30%+ increase in reuse of design requirements
- 30%+ decrease in rework
- 30%+ improvement in communication and collaboration
- 15% reduction in audit preparation time



As an emerging leader in building trusted controls for robotics and autonomous systems, FORT required the ability to manage requirements while meeting strict industry standards. The company was using Google Sheets and Confluence; however, it continuously ran up against productivity roadblocks.

"Writing requirements with Google Sheets was a very tedious process," says Eric Zaremski, lead program manager at FORT. "It was easy to lose track of where linkages were, so it required tremendous focus, opening up risks for missing requirements and coverage issues. Also, we ran into challenges with higher-level certifications requiring backward and forward traceability, and that wasn't possible with Google Sheets."

Initially, to solve these challenges, the company adopted Confluence with the Requirement Yogi add-on. It provided anchors for requirements but also introduced new challenges.

"Confluence isn't designed to handle large documents, so the more documents you added to a page, the slower it loaded," says Zaremski. "I had a system engineer who needed frequent breaks because the tool was so frustrating. Also, if you didn't put everything in the exact same format on all pages, it was hard to decipher what you were trying to trace."

Conducting review cycles in Confluence was also a challenge with no efficient way to manage comments in a tool not specifically designed for managing requirements. When a team member visited a page and added comments, the comments would disappear once the page owner updated it. "We ended up in this circular discussion, with folks rehashing the same requirements because we didn't have a history," says Zaremski.

"We decided that a formal tool was needed, which led us to evaluate a few different options, including Jama Connect."

#### ERIC ZAREMSKI

LEAD PROGRAM MANAGER, FORT ROBOTICS

# **FORT** required a tool that:

- Addressed tedious workflows related to writing, gathering feedback, and approving requirements.
- Provided backward and forward traceability.
- Made it easy and efficient to meet standards.





FORT required a tool that was simple to use, integrated easily with Jira for software issue tracking, and supported future growth and scalability.

After much research, the team narrowed the options to codebeamer, Helix, and Jama Connect. They then put each to the test, based on the following:

- User-friendly interface that would facilitate effective review cycles and help meet standards
- Backward and forward traceability
- Easy integration with other business-critical tools, such as Jira
- Supports the company's growth and scalability goals

Only Jama Connect passed the test. In evaluating codebeamer, they discovered that while it had all the "bells and whistles" compared to Helix, the user interface was clunky. "It was hard to understand where the requirements needed to go and how they were structured," says Zaremski, "whereas with Jama Connect, we could easily see what we needed to do, so we eliminated codebeamer right off the bat."

When the company evaluated Helix, it discovered that it lacked what only Jama Connect had – the user friendliness and robust integrations that FORT needed.

"The product team inputs requirements into Jira, so it's important to have a reference for high-level product requirements," says Zaremski. "I need to delegate work in Jira, so having that integration is important."

Jama Connect Review Center allowed FORT to transition from a document-centric to a data-centric approach, and capture reviews, approvals, and feedback from stakeholders in one central place. Zaremski found that collaboration was simplified since it leveraged an important @ mentioning system that his team already used in other tools.

With future growth and scalability in mind, FORT wanted to ensure the selected tool would meet its needs both today and in the future. After reviewing the options, the team selected Jama Connect because it best aligned with the company's goals. Thanks to Jama Connect's Live Traceability™ FORT didn't need to change processes, tools, or field values for Jama Connect to trace the life of a requirement through all stages of the development lifecycle, in real-time.



Jama Connect is helping drive innovation and product success at FORT with a requirements management and traceability solution that's proven to increase the reuse of design requirements, decrease rework, improve collaboration and communication, and reduce audit preparation time.

## In less than one year after onboarding the new solution, the company has achieved:

- Reduction of requirements approval time to minutes from weeks
- Increase in reuse of design requirements of at least 30%
- Decrease in rework by at least 30%
- Improvement in communication and collaboration by at least 30%
- Reduction in audit preparation time of at least 15%

With strict standards to meet, FORT Robotics can now easily show traceability and good test coverage, which was a highly manual process with previous tools.

"With our previous process, a requirements document, which could include 30 to 50 individual requirements, could take two weeks to process, requiring the manual gathering of comments, exporting them, and then copying and pasting updates. With Jama Connect, we reduced requirements approvals down to minutes and collaboration is much smoother. We can knock out easy requirements first and then focus on the more difficult ones, streamlining the entire approval process," explains Zaremski.

The FORT team can now easily keep users and stakeholders looped into communications in real time, "Our company communicates with @ mentions all the time, and Jama Connect having that capability supports us getting things done quicker because our team is used to it and can hop right in and complete tasks."



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LEAD PROGRAM MANAGER. FORT ROBOTICS

# **OUTCOMES** (CON'T)

With the goal of keeping safety architecture the same across many products, using Jama Connect means they won't have to continuously recreate requirements. Additionally, traceability is improved with access to Jama Connect's unique Live Traceability feature which allows them to easily view both downstream and upstream requirements. As the company moves forward and focuses on growing profitability, Zaremski feels confident that using Jama Connect will help do that.

"Using Jama Connect, we have access to automated and structural features, making life simpler in terms of getting reports, adding new products to our existing architecture, reuse, and helping to reduce audit preparation time," he says. "I'd say that if any company is serious about meeting any standard that requires extensive requirements management, investing in a tool like Jama Connect will help save time and money."



# **ABOUT FORT ROBOTICS**

FORT's first-of-its-kind Robotics Control Platform gives robot builders and users safe, secure, and dynamic control over their machines.

As autonomous systems become more common on today's worksites, FORT's hardware and software solutions help companies maximize human-machine collaboration while reducing risk – ensuring that people, assets, and data are protected and productive. Founded in 2018, FORT serves hundreds of customers including industry leaders in warehousing, agriculture, construction, and many other verticals. More information at fortrobotics.com.



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.