Gaining Full Control and Traceability of the Product Record

ABOUT THE COMPANY

With a worldwide customer base and offices in the U.K. and U.S., ALL.SPACE is a pioneer of the world’s first multiservice, high throughput range of satellite terminals that can be customized to meet the performance, cost, and power requirements of countless applications—from complex government defense systems and mobile backhaul solutions to next-generation connected experiences aboard commercial airliners, cruise ships, offshore rigs, and even small fishing boats at sea. Unlike traditional antenna technologies which can only link to one satellite at a time, ALL.SPACE’s novel optics technology enables customers to simultaneously connect to multiple satellites in different orbits through a single multibeam terminal.

AT A GLANCE

Mission
Innovate to extend the boundaries of global connectivity for customers

Best Thing About Arena
Highly configurable and flexible system

Bottom-Line Impact
Provides ALL.SPACE with complete control and traceability of the product record

Key Benefits
- Enables high-level change control and traceability for product requirements
- Provides single source of truth for product teams to quickly access the latest product information
- Fulfills customer and investor expectations for data integrity
- Easy to deploy, configure, and use
- Enables collaboration across global teams
- Facilitates faster engineering change cycles
- Scales with a rapidly growing business
BUSINESS CHALLENGES

As a high-growth satellite communications company, ALL.SPACE attracted the interest of many customers and investors with its breakthrough technology. To present itself in the best light and stand out from the competition, ALL.SPACE needed a systematic approach to showcase how their product was progressing and how it addressed evolving market needs.

In addition, ALL.SPACE relied on manual, disconnected systems to maintain CAD/CAM design files and other documents associated with their product record. Given the complexity of the product design, ALL.SPACE required a system that could better manage and control high volumes of product data throughout the entire product lifecycle.

THE SOLUTION

After evaluating several systems, we ultimately chose Arena PLM for its flexibility. It had the functionality that we needed for bill of materials (BOM) and requirements management. We also found it very cost-effective, enabling us to start with fewer licenses and add more as the company expanded.

—James Moyle, Quality Assurance & Systems Manager

By aggregating product assemblies, requirements information, design files, quality documents, and other essential records into one cloud-based system, Arena PLM enables ALL.SPACE to control, track, share, and approve the product design.

Because automated change processes and revision controls are applied to parts, BOMs, and documents, ALL.SPACE teams always have access to the most current and accurate product information.

Arena provides ALL.SPACE a single, unified system to manage and control the entire product record

From the beginning, James Moyle, Quality Assurance and Systems Manager, championed the idea of adopting a product lifecycle management (PLM) solution. Having used similar product development tools at previous companies, he understood how PLM could help ALL.SPACE manage its increasingly sophisticated product design while supporting the company’s future growth plans.
The ability to drive real-time collaboration in Arena PLM anytime and anywhere also keeps ALL.SPACE’s dispersed teams on the same page and enables faster engineering change cycles to meet their product development milestones.

**KEY BENEFITS**

ALL.SPACE deployed Arena right before the COVID-19 pandemic hit. Although product teams were forced to start working remotely, they were able to act fast and collaborate easily from different locations to successfully configure the system to meet their needs. Ultimately, having Arena in place throughout the pandemic enabled ALL.SPACE’s dispersed teams to stay connected and keep their product development work on track.

**Configurable Requirements and Bill of Materials**

As part of Arena’s setup and configuration, ALL.SPACE’s engineering team created a requirements BOM. This enabled them to mimic the architecture that they were using in their product assembly BOM and establish the high level of detail, change control, and traceability for requirements. “Because Arena is so flexible, we’re able to really think outside the box and make the system work for us,” stated Stuart Hayllor, Associate Quality Engineer at ALL.SPACE.

**Meeting Customer and Investor Expectations for Data Integrity**

When conducting product demos, ALL.SPACE can quickly access the latest product information from a central location and show the flow of product requirements from the customer level down to the testing level. Team members can also show how files are associated with design reviews and BOM structures. “Using Arena PLM, our customers and investors can clearly see that we have full control of our product design record. It instills confidence that we’ve established a solid foundation for our product development processes and demonstrates our commitment to delivering high-quality products,” added Hayllor.
TAKING INNOVATION A STEP FURTHER

Since the initial adoption of Arena PLM, ALL.SPACE has tripled in size. Now that teams across the organization are embracing the system, the company is looking at new ways to optimize product-related business processes and take its satellite terminals to the next level.

ALL.SPACE is starting to use Arena to incorporate quality records and associated processes such as the management of nonconformance reports for incoming materials. As the engineering team continues to develop more prototype designs, they can link the related nonconformance report directly to an affected item in the BOM for greater visibility—making it easier to analyze and resolve issues quickly.

To accelerate the handoff between electrical and mechanical design teams, ALL.SPACE is integrating Arena PLM with Altium and SOLIDWORKS engineering design solutions. They will also eventually integrate Arena with an enterprise resource planning (ERP) system to ensure a fast and accurate handoff of the full product design.

As customer demands evolve and the need arises for new designs, ALL.SPACE will continue to leverage Arena Requirements to manage different product variations and expand its product and service offerings.

“Because we took a proactive step to adopt Arena PLM, we’ve been able to avoid engineering change delays, design errors, and other product development roadblocks that many companies encounter. Having our product record in a single, unified system brings order to the chaos and keeps our operations running smoothly.”

—James Moyle, Quality Assurance & Systems Manager