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CUSTOMER STORY

Innovative Dental Equipment and Technology Company, Convergent Dental, Selects Jama Connect® For Its Quick Adoption and Live Requirements Traceability.

Convergent Dental chooses Jama Connect to manage compliance through in-depth reviews and to save valuable engineering time.

- Headquartered in Needham, MA
- **Expertise:** Creating breakthrough laser technology that completely changes how people think of dentistry
- **Awards:** The Company's flagship product, Solea®, was voted a Gold Winner for innovation at Edison Awards 2016

Convergent Dental, Inc. is a privately owned dental equipment and technology company. The Company's flagship product, Solea®, is the only CO₂ laser to be cleared by the FDA for all-tissue indications and delivers an anesthesia-free, blood-free, suture-free experience that you can count on. Solea is a true breakthrough in dental laser technology that offers a completely different experience for both dentists and patients when compared to traditional instruments or any earlier laser treatment. Solea enables increased new patient flow, better clinical outcomes, significant efficiency gains, and new procedures.

CONVERGENT CUSTOMER STORY OVERVIEW

CHALLENGES

- Manual, cumbersome processes were slowing teams down significantly
- Difficulty compiling necessary documentation for compliance
- Proving all requirements are tested

EVALUATION CRITERIA

- Easy-to-use platform with a low barrier to entry
- Out-of-the-box configurations
- Automated traceability

THE OUTCOME AND THE FUTURE

- Audit preparation decreased from three weeks to one day
- Streamlined review cycles
- Plans for leveraging Jama Connect for test management

Manual, cumbersome processes were slowing teams down significantly

As a small team, the development team's motto is that no one has the option to be "dead weight." So, when their engineers were forced to spend hours manually editing requirements and tracking traceability using Word and Excel documents, it wasn't great for team morale, or for their pace of development.

While using Word and Excel, they found themselves tracking across multiple documents, all with their own trace matrix tables relating to different requirements. The fallout from this process is that even a single word or letter change in a low-level subsystem requirement led to updating the corresponding requirements documents and their trace matrix tables. So, a single letter turns into not one change but potentially six changes across five different documents.

This manual method of digging through Word documents led to cumbersome requirements management and traceability tracking from engineers whose time should be devoted to systems engineering for product development.

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We have a small team with a large amount of features and updates to perform on an ongoing basis. We all work really hard here, and there's no option to be dead weight. Getting rid of that wasted time in Word and Excel, and getting our test engineers back to work, is the ultimate goal.

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Craig Woodmansee
Electrical Systems Engineer
Convergent



Difficulty compiling necessary documentation for compliance

In the medical device industry, proving that there are no unvalidated or unverified requirements is critical for compliance. While Convergent prepared to demonstrate compliance with De Novo Classification Request standards, they began to seriously consider the challenges of their documents-based requirements management process.

They knew their requirements were tested, but in order to show proof, they had to go through hundreds and hundreds of pages. They tediously combed through all their records, which took weeks, significantly impacted productivity, and slowed time to market.

Preparing for the De Novo submission was a catalyst for this in-depth review of their requirements. If they continued down the path of Word and Excel, an auditor — if they decided to pull on any small little string — would have resulted in more time trying to track down the requirements. This experience was the deciding factor that led them to understand that the Convergent team needed a better tool.

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Instead of just being able to reference the reports and say, ‘Look, they’re here,’ I had to put together the list and then ask a team member to go dig down those. And that took him a couple of days to dig up all that testing. So that was the loss — time from our test engineers.”

Craig Woodmansee
Electrical Systems Engineer
Convergent

EVALUATION CRITERIA

To solve their challenges, and in order to save valuable time in the development process, the Convergent team knew they needed to move to a modern and proactive requirements management tool.

Many team members had shared their past experience with Perforce Helix, however, when they began evaluating new solutions, they realized they needed more robust configurations and a more intuitive interface.

The evaluation process for selecting a modern requirements and test management solution ultimately came down to Inland codebeamer and Jama Connect®.

The following capabilities and features were ultimately why Convergent selected Jama Connect:

Easy-to-use platform with a low barrier to entry

Throughout the evaluation process, it was important to the Convergent team that they found a platform that was easy to use, allowing all team members to easily get started without spending significant time learning a complex platform.

As a small team, Convergent needed a platform that would allow them to move quickly and be agile. They didn't have time to waste when looking for the requirement management tool that would solve their challenges. They gathered as a team for an internal review where they asked each other questions such as, "How easy was it to learn?", "How good and intuitive did it feel to use?", and "How fast can we be onboarded?"

During their evaluation, Jama Connect's online training videos demonstrated just how easy the platform was to use. After watching tutorials, critical team members felt they already knew how to use the platform and that Jama Connect would provide a good level of support. After their trial, they discovered that the low barrier to entry and quick adoption helped Jama Connect stand out from other platforms and made their team excited when they received approval.



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When comparing Jama Connect and Helix, ease of use and the interface played a large role in that decision. While Perforce has many strong applications, this specific area is one where Helix fell short.”

Craig Woodmansee
Electrical Systems Engineer
Convergent



Out-of-the-box configurations

Implementing a new system is a big deal for any company, and while the team knew onboarding a modern requirements management solution would greatly improve the team's efficiency, they knew that they were facing a relatively significant change. To save time for their quality team, they prioritized finding a solution with out-of-the-box configurations aimed at the design control process.

While evaluating Jama Connect, they found preconfigured design rules that closely matched what they currently used.

Automated traceability

When evaluating solutions, Convergent knew that a key component of their search revolved around a platform's ability to automatically — and proactively rather than reactively — create traceability from design, all the way through to verification and validation.

What they found was that Jama Connect was the only platform that could create Live Traceability™, the ability to see the most up-to-date and complete upstream and downstream information for any requirement, no matter the stage of systems development or how many siloed tools and teams it spans.

The Convergent team knew that this level of traceability would allow the team to work faster, simplify their process, and improve the quality of their project management.

After importing user needs and requirements, creating relationships, and running tests in Jama Connect, the Convergent team realized that traceability became semiautomatic.

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You can't beat it. It's too easy. Using the out-of-the-box configurations, I can just click and view the trace matrix. That was phenomenal.”

Craig Woodmansee
Electrical Systems Engineer
Convergent

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We don't have to manually maintain traceability because Jama Connect does it for us. Once requirements are in place, Jama Connect just says 'if you make a change, then here are all the things it affects.'”

Craig Woodmansee
Electrical Systems Engineer
Convergent

Audit preparation decreased from three weeks to one day

Jama Connect allows teams to create catalogs of reusable versions and sets of requirements. With versioning, baselining, and change management of the requirements in one place – rather than siloed documents – teams can improve reuse, reduce design inconsistencies, and reduce the discrepancies found during testing, verification and validation.

Since implementing Jama Connect, Convergent's audit preparation has become effortless thanks to the platform's ability to export necessary artifacts with the click of a button. What previously had been a very manual, tedious process that took their teams seemingly endless hours of work can now be done instantly with Jama Connect.

When submitting a report, the time is now in the audit, not the pre-work.

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The fact that I can simply export a PDF for audit preparation saves me three weeks of time. Regulatory bodies don't need to know that Jama Software exists because it's exporting the same report that I had to do manually in the past, just instantly. So that was a major benefit.

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Craig Woodmansee
Electrical Systems Engineer
Convergent

Streamlined review cycles

Now, with Jama Connect, the Convergent team has simplified their review process by having a single place for reviewers, approvers, and moderators to collect and manage all requirements and feedback for a project – in real-time.

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The nice thing about Jama Connect is that the Review Center enables people to do that on their own time while still forcing them to review every change or requirement with the line-by-line kind of review structure. So, when we can enable the rest of the team to do it on their own time and keep that communication in the comments, in the review threads, I think that's a really awesome way to keep our development process running smoothly and to avoid the three-hour meetings where we have to sit and read through a document.”

Craig Woodmansee
Electrical Systems Engineer
Convergent



ABOUT JAMA SOFTWARE

Jama Software is focused on maximizing innovation success. Numerous firsts for humanity in fields such as 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, visit us at: jamasoftware.com.