

RESULTS

- Intuitive visual process development accelerates time-to-market by 80%
- Cross-enterprise collaboration boosts efficiency by 50%
- Comprehensive visibility and reporting improves decision making
- Automation reduces management time



CHALLENGE

- ISO and CMMI compliance required improved visibility and reporting
- Bug tracking lacked customizability
- Frequently evolving processes slowed time-to-market
- Multiple logons hindered efficiency

PRODUCT

Serena® Development Process Management application

INDUSTRY

Defense



CUSTOMER FOCUS

Detecting development efficiencies

Advanced Acoustic Concepts accelerates time-to-market by 80 percent with Serena Development Process Management

No detail is too small to be submerged in the creation of today's submarine technology. Advanced Acoustic Concepts (AAC) plays an important role in the evolution of submersible vehicles with everything from sonar detection and classification to torpedo defense—and supports these activities with advanced distributed training, software engineering, and more. Capabilities in all of these areas are among the reasons this market leader has been selected as a lead contractor for the U.S. Navy Surface Ship Torpedo Defense program.

AAC draws on the ingenuity of its staff to innovate new solutions, foster greater collaboration, and generate efficiencies in its already top-performing workforce. However, a team distributed across the United States meant costly, cumbersome development processes that unnecessarily lengthened time-to-market.

To improve collaboration and productivity, AAC needed a new solution to support flexible, fast process development. "We looked at a free tool, but it lacked robust workflow and was difficult to customize, which could have led to high hidden maintenance costs," says Gerard Pinzone, senior manager and director of development for AAC. "Since our processes evolve frequently, we needed a way to visually create the workflow, states, and transitions as well as make changes on the fly to reduce expenses and maximize development resources."

Pinzone also sought a solution to comply with all matters associated with ISO 9001:2000 and Capability Maturity Model Integration (CMMI) certification. With comprehensive issue tracking, AAC could ease compliance between certifications, including weekly reports of all outstanding corrective and preventive actions, software releases and status, build releases, and testing.

Serena Development Process Management offers multifaceted solution

AAC ultimately chose the Serena Development Process Management application to address its challenges. Once the application was in place, however, the company found that it had gained much more than a bug-tracking system. "The Serena Development Process Management application can benefit any process that needs to be clearly defined and tracked," says Pinzone. "This is a transformative technology. The combination of feature-rich change request management, visual prototyping, and flexibility allows us to serve the evolving needs of the whole business."

With Serena, AAC has gained crucial effectiveness in managing all aspects of application releases, issues and defects, incidents and escalation, and change request management. First implemented in the Independent Verification and Validation (IV&V) department, the application is now part of the fabric of the enterprise, involved in contract management, purchasing, hardware operations, and program management.

Accelerated processes improve time-to-market by 80 percent

The streamlined processes enabled by the Serena Development Process Management application help AAC speed time-to-market to better support its customers. "Serena gives us a development advantage because our team can sit down for less than an hour and have a working prototype that is 80 to 90 percent complete," says Pinzone. "As a result of the efficiencies gained through Serena Development Process Management, our time-to-market is approximately 80 percent faster than if we didn't have the application."

And when processes need to change, Serena makes it easy. "It's intuitive to customize the tool and evolve as we go," says Pinzone. "We don't have to hire a consultant to do the work, so adapting our system to business needs doesn't incur an extra cost."

"Serena's tools help bring the theories of process improvement and quality into reality."

- Gerard Pinzone, Senior Manager,
Director of Development,
Advanced Acoustic Concepts



Consolidated system improves efficiency by 50 percent

By consolidating multiple departmental tools to the single Serena Development Process Management application, AAC improved collaboration and minimized miscommunication. Eliminating multiple logins and operating system incompatibilities has allowed the company to accelerate its development process and improve productivity. "For example, when a new piece of software is developed, engineering and configuration management baseline it, software developers build it, IV&V tests it, and shipping packages it," explains Pinzone. "The end-to-end collaboration offered by Serena has helped us achieve an estimated 50 percent increase in efficiency."

Improved issue tracking eases certification process

At the executive level, the Serena Development Process Management application has provided peace of mind that the company will be able to achieve biannual ISO recertification easily—and without excess work on behalf of AAC developers. For example, AAC was able to create a single tool to monitor data for each part including a photo, serial number, part number, and more. The Serena Development Process Management application has also allowed AAC to build in automated efficiencies. Alerts are sent out to the appropriate users when an item is within 30 days of requiring calibration, and contracts, agreements, and proposals are automatically tracked to help ensure compliance.

"We never could have thrown enough money or time at a generic bug-tracking solution to get it to fit our ISO needs," says Pinzone. "The Serena Development Process Management application gives us the flexibility to adapt our environment to meet compliance requirements—as a result, an ISO 9001 auditor told us that it was one of the nicest calibration systems he's ever seen."

Improved visibility and reporting saves management time

By incorporating the Serena Development Process Management application into its IT environment, AAC has gained a newfound visibility across its infrastructure, improving business decision making across the enterprise. "With a keystroke, I can generate a report for my boss on my progress or get my ISO report," says Pinzone. "Prior to Serena, there was no traceability or visibility into status. Now people no longer have to go asking for information—they can see it live, and the data is all in one place so we can report across business groups."

Needless to say, the Serena Development Process Management application is fundamental to Advanced Acoustic Concepts' operations. "The Serena application offers significant savings with a complete focus on day-to-day operations, as well as an ROI that is harder to quantify," says Pinzone. "It is so integral to operations that we don't even think about it. We just know that the business could not run without Serena."