

Industry:
Automotive

Seapine Products:
TestTrack Pro

“The value of TestTrack Pro is improved communication and documentation. It works so well with our development process; we just keep expanding the reach of what we use the tool for.”

Eric Walstra
EE Process Improvement Manager

Gentex

Gentex develops advanced electro-optical products (electronic devices combining photoelectric sensors and related electronic circuitry). They are the world’s leading supplier of electrochromic, automatic dimming rearview mirrors for the automotive industry. They came to Seapine Software looking for a defect tracking solution and now use TestTrack Pro to comply with Automotive SPICE.

Situation

Years ago, when it had only a few software engineers, Gentex used a spreadsheet to track software defects. While this was better than no tracking at all, it had serious drawbacks. Two people could not have the file open at the same time, which meant it was impossible for members of the development team to see the status of a defect or project whenever they needed to. Developers had to walk from cube to cube or make a series of phone calls to determine the status of an item.

Gentex knew that, as they grew, not having project and defect information available to the entire team would cause serious delays. The organization wanted to improve communication, and the development team wanted to expand their tracking to include feature requests and even individual code changes.

Solution

Gentex considered a variety of solutions, including both open source tools and larger enterprise solutions, but the solution that stood out was TestTrack Pro.

TestTrack Pro met all their requirements, but the differentiating factor was its ease of use. It was simple to install and manage. “Everything from adjusting the workflow to adding custom fields is easy to do,” says Eric Walstra, EE Process Improvement Manager at Gentex. “We didn’t have the internal resources to dedicate a full-time person to administer our tracking tool. One person can administer TestTrack Pro in his or her spare time or on a lunch hour.”

Results

From the moment Gentex implemented TestTrack Pro, communications improved. Gentex ensured that all the necessary information to resolve a defect or implement a change is captured through the use of required custom fields. They also automated notifications so the right developers receive emails when an item reaches certain milestones.

However, they do not simply use TestTrack Pro to manage software defects. They track everything involved in the software development process, from the feature requests and requirements to design revisions and actual changes in the code. "If it affects the ones and zeros of the code," says Walstra, "then there is an item in TestTrack Pro for it." Storing all the development data electronically allows them to see who requested the change, why they requested it, and what changed in the code as a result. As a side benefit, tracking to this level of detail has allowed Gentex to comply with Automotive SPICE requirements, a goal that they had not originally considered as part of implementing TestTrack Pro. For any change in the code, they have a complete audit trail, from what prompted the change through all of the actions taken to complete it.

Gentex's use of TestTrack Pro is not limited to development. When project managers saw the value in TestTrack Pro, they jumped on board and started entering project issues into the database. Project managers track customer requests, hardware requirements, and issues—any task or information that affects the project. "Everything related to the project is available electronically," says Walstra, "so no one is left guessing about the status of an issue."

Gentex even expanded their implementation of TestTrack Pro to the prototyping process. Creating prototypes of circuit boards and other hardware components for automobile manufacturers was a paper-based system. Now the prototyping process is managed through TestTrack Pro. Project managers and others outside the group use the tool to submit orders. Gentex created custom fields for the prototype project to ensure that all the necessary information is captured up front. The prototyping project also has its own custom workflow, which streamlines the overall process. Instead of sifting through hardcopy requests, anyone can log in to TestTrack Pro and see who asked for what, what action was taken, and the status of the order. Most importantly, they can effectively communicate delivery dates. Automatic emails notify the right people at the right time, and everyone has access to the most current information.

Gentex went searching for a defect tracking application and ended up finding a more powerful change management solution. "We just keep expanding the reach of what we use TestTrack Pro for," says Walstra. "It offers mid- to high-level functionality at a mid- to low-level price."