

Industry:
Publishing

Seapine Products:
TestTrack Pro

Pearson Education

Pearson Education is a division of the \$5 billion global communication and publishing firm Pearson plc. Pearson Education's business units span a wide range of educational publishing, from traditional higher-education textbook publishing to cutting-edge, computer- and Internet-based education initiatives.

Pearson Education's Central Media Group is an example of how a software development organization can use Seapine Software's TestTrack Pro defect tracking solution to streamline its product development process, improve collaboration and communication among team members, and develop a better product.

Situation

The Central Media Group (CMG) supports development of a number of products for Pearson Education, including Course Compass (a product that helps educational instructors develop online course content) and Daedalus Online, a collaborative online environment for writing and composition students. The CMG also provides development for internal services to Pearson Education's business units, such as customer support.

Because it supports a large number of programs—often developed in conjunction with outside partner companies—the CMG's product development cycle is complex. As such, the quality assurance process—in which team members test the various software products under development to identify “bugs,” or flaws in the software's operations—is a complicated one to manage.

One of the most crucial parts of the QA process is bug tracking—the process by which various defects in the software are identified, logged, and resolved. In the past, the CMG used a variety of methods to track software bugs, including email, spreadsheets, and text files. Different team members would use different methods to keep track of software bugs. While the process worked, it was inefficient and made communication among team members more difficult.

Recognizing the need for a better approach to defect tracking, Pearson investigated a number of options before selecting TestTrack Pro as its solution in July 2000. TestTrack “was a recognized solution in other companies we work with,” and thus got the nod at Pearson, says David Stemoski, quality assurance manager for the CMG at Pearson. “It was sort of a shoo-in.”

“By improving efficiency and communication among the QA team, TestTrack Pro ultimately allows us to build better software products.”

David Stemoski
QA Manager

According to Stemkoski, the difference between the CMG's bug tracking process before introducing TestTrack and afterward has been dramatic. "It has consolidated our bug tracking information. Everything goes into a central database," he says. "That's a big step. You'd be surprised at how many people don't do it that way."

Solution

After purchasing TestTrack, the CMG's QA team began developing a prototype bug tracking database that would become the model for each of the five databases the CMG currently maintains. According to Stemkoski, the team was surprised at how quickly the database was developed and deployed. "When we first started the QA process with TestTrack, we had no idea how long it would take to get something up and running and tracking bugs," he says. "Now it's assumed that it will be up and running that day or the next day."

While TestTrack Pro's out-of-the-box ease of use allowed the CMG to get to work quickly, its powerful communication functions and small learning curve have greatly improved the productivity of QA team members and outside partners.

As partner companies develop program components for Pearson, their developers and Pearson's QA team have access to the same bug database. Pearson uses both the Windows-native TestTrack client and the Web client to improve communication among the various team members.

As bugs are detected, both Pearson and outside team members enter them into the TestTrack database. When a bug is entered into the database, appropriate team members are automatically notified via email. After the bug is verified, the QA group assigns the bug to the software engineering group, which develops a solution for the bug. Then QA is again notified via email, and the bug fix is verified, logged, and closed.

The email function means that team members can spend less time in meetings and on phone calls discussing bugs, and more time on fixing them, says Stemkoski. "It's about as seamless as you can get."

TestTrack can also be configured to the skill level of each user, says Stemkoski. "It's pretty intuitive, but as they acquire a little more background I can increase their access to the data" further enhancing the team's productivity.

Results

TestTrack Pro is easy to use, but it's also easily configurable—to the degree that Pearson now supports five different bug databases for its different products and services with TestTrack Pro. Each database is customized for its particular product or service, and all were developed in about a day.

TestTrack Pro's ODBC compatibility also means that data from each database can be exported into a spreadsheet or another database format for analysis. Similarly, it can import data from a variety of formats.

"One group had 139 products. Instead of entering 139 products in the screen, they sent us the list in a spreadsheet," says Stemkoski. "We converted the spreadsheet into a text file and imported a perfectly clean list of products. That was a big plus in configuring the database."

The CMG stores test cases in another database format, which they can import into TestTrack Pro as needed. "Everything is linked—that way information is right on my desktop," Stemkoski says.

Pearson Education is definitely pleased with the decision to adopt TestTrack Pro. "Absolutely, not even a question," says Stemkoski. "100 percent. It has probably streamlined our process by better than 50 percent."

By improving efficiency and communication among the QA team, TestTrack Pro ultimately allows Pearson Education to build better software products. "We don't release the product without taking note of outstanding bugs, where the system is in a quantifiable way," Stemkoski says. Under its previous QA system, this "big-picture" view was more difficult to obtain.

Now, "we look to TestTrack Pro to make our decision," he says.

