

Complex Testing of a PDF Publishing Solution

"Your specialists did a great job to help us release a perfect product."

Harold Moyles
Project Manager

Customer

The customer is a company of experienced software developers and experts with 8 years experience in Adobe Acrobat® and Portable Document Format (PDF) solutions development.

Company	<i>Software Development Company</i>
Country	<i>USA, Australia</i>
Business Domain	<i>Publishing Software</i>
Services Used	<i>Quality Assurance Outsourcing</i>
Cooperation Model	<i>Independent Software Testing and Quality Control</i>
Duration	<i>2 months</i>
Efforts	<i>3 man-months</i>

Project

The product is a comprehensive, fully featured PDF creation, conversion, and editing package. It allows users to create PDF documents from more than 200 file types and provides full control over document security. Additionally, it is the only product in its class that allows users to quickly combine multiple files into one PDF document or extract individual PDF pages.

Challenge

Taking into account the number of test configurations (different versions of Windows and MS Office), most of the testing was carried out using VMware solutions. This helped us to reveal specific problems. For example, it was impossible to install printer driver, therefore the planned test scope for VMware was compromised. We allocated an additional workstation with all possible combinations of Windows and MS Office. This allowed us to perform all the tests that were planned.

Developing integration with MS Office is a complicated process. Therefore, the quality of builds was low. As a result, we had to test 11 builds instead of 3 scheduled. We decided to additionally appoint QA engineers and redistributed the test scope to complete the work in time.

Solution

The following testing types were performed:

- Installation testing
- License testing
- Functional testing
- Stress testing
- Performance testing
- GUI testing
- Regression testing
- Usability testing
- MS Office integration testing
- Compatibility testing (different combinations of OS and MS Office)

Compatibility testing was done to guarantee the seamless application work on various workstations with different software packages installed.

During functionality, GUI, and usability testing, we evaluated the application from the end user's point of view.

Normally, integration testing is the most complicated type of testing because some defects are difficult to reproduce. Some of the defects we detected could be

reproduced only on several workstations. We provided remote access to the workstation for debugging. To make sure the issue is fixed, we validated it on several workstations.

Technologies used

Operating systems: WinXP, Vista, Win2003 Terminal Services, Win2000 Server, Win2000

Virtualization tools: VMware, Virtual PC 2004

Defect tracking system: Rational ClearQuest, Team Foundation Server, FogBugz

Success

- Participation of our QA specialists ensured a successful product launch.
- The QA team managed to complete the project on a very tight schedule.
- Our recommendations helped make the product more user-friendly.