

## Complex Testing of a Document Processing and Delivery Solution

"Our company has had many important releases in the history of the company but none compare to the current one. These are giant steps forward and I am sure will have a tremendous impact on the company's future.

Please pass along heartfelt thanks from the entire company to all your guys for the many long hours of hard work and a job well done and well delivered."

Chief Executive Officer

### Customer

The customer is one of the leading companies that implement solutions for files processing and delivery.

<b>Company</b>	<i>File storage and delivery service provider</i>
<b>Country</b>	<i>USA</i>
<b>Business Domain</b>	<i>Document management software</i>
<b>Services Used</b>	<i>Functional Testing, Stress Testing, Database Testing, Migration Testing, GUI Testing, Installation Testing, Integration Testing, Compatibility Testing</i>
<b>Cooperation Model</b>	<i>QA Outsourcing for a Development Company</i>
<b>Duration</b>	<i>18 months</i>
<b>Efforts</b>	<i>54 man-months</i>

### Project

It is a secure content delivery and archiving platform that integrates secure messaging, large file transfer, and content archiving into existing collaborative applications. The result is higher productivity, reduced risk, optimized IT infrastructure and faster compliance.

### Challenge

- The customer turned to A1QA for recommendations on how to improve the product so that it complies with the world-class industry standards.
- For smooth delivery of the project, the customer looked for a professional QA team attuned to the running business needs and able to cooperate effectively with the in-house development team.
- The required procedures involved, among others:
  - Installation testing of all system components and services.
  - Development of automated test scripts to check if the file replication service is fail-safe.
  - Execution of a wide range of tests for all system constituent parts, including new components and subsystems. More details of the test types please see below.

### Solution

To meet the customer's objectives, the QA team developed a detailed test plan describing all participants, their functions and responsibilities, and then performed the following tests:

- Installation testing of the web application, its services (FTP, Mirroring – a replication service, Retention – a service for managing out-of-date files, FCM – a service for integration with antivirus software, Purge – a service for file system cleanup), plugins for Outlook, Lotus Notes, and MS SharePoint.
- Functional testing of the web application, FTP server, plugins for Outlook, Lotus Notes, MS SharePoint, data replication service, file cleanup service that removes outdated files according to specified rules.
- Automated fail safety testing of the mirroring service.
- Testing of the graphical user interface for compliance with the industry standards.
- Cross-browser testing to check whether the product is compatible with various browsers (IE6.0, IE7.0, Safari).
- Integration testing to ensure that the product integrates smoothly with Outlook2000, XP, 2003, 2007, Lotus Notes 6.5,7.0, SharePoint 2003 and 2007.

- SSO (Single Sign On) testing.
- Testing of mobile pages on emulators and real mobile devices (WinMobile 5.0-6.0, Blackberry).
- Migration testing.
- Testing of the web application services (4 versions).
- Regression testing of all components.
- Testing during the system deployment on the customer servers in the US, UK, and Australia.

## Technologies used

**Operating systems:** WinXP, Vista, Win2003 Server, Win2000, Win98

**Browsers:** IE6.0, IE7.0, IE8.0, Safari 3.0.4

**Defect tracking system:** QuickBase

VirtualPC 2004

WMWare Workstation

**Database tool:** MS SQL Server

**Development tools:** Visual Studio .NET 2003 TE

A full-fledged domain with an Exchange server was set up for SSO testing.

## Success

- Three new system versions were released during the period when A1QA participated in the project.
- The QA team developed and provided to the customer a complete set of well-structured test documentation. Also, the team contributed to the design of new functional modules.
- The customer managed to develop and release a set of new components, including MS SharePoint integration mechanism, secure file publication service, rule-based file removal service.
- Expert testing considerably reduced time-to-market for the new components.
- Migration of existing system users does not involve the risk of data loss and does not affect the system performance.