ITEXT

ROOTS SOFTWARE

10x faster PDF generation in the Car-Pass program

Roots Software specializes in business driven, sustainable and customized software solutions.

Car-Pass is a non-profit agency responsible for preventing second-hand car odometer fraud in Belgium.

- Manages a central database of odometer readings and issues Car-Pass certificates to sellers.

- In 2013 collected 14,676,983 odometer readings coming from 6,143,554 active vehicles.

- Issued 777,790 Car-Pass certificates.

BACKGROUND

Roots Software was asked to completely rebuild the Car-Pass IT system. Main goals were to handle the speed and volumes required for processing mileage and delivering Car-Pass certificates. Roots Software used the iText PDF Library to build the business critical PDF document generation requirements including dynamic PDF templates and QR codes.

GOALS

As the volumes and complexity grew, Car-Pass was significantly struggling with the performance, maintainability, scalability, traceability and security of their current IT solution. To remedy this, a completely rebuild of the Car-Pass IT system - dating back from 2006 - was needed.

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With iText we have the peace of mind that we are delivering a solid solution to our client.

KOEN DEHAEN - MANAGING PARTNER, ROOTS SOFTWARE

CHALLENGES

Roots Software was selected to completely rebuild the Car-Pass platform. Car-Pass needed to have its new platform in production within one year from the start of the project. For its document requirements (PDF tool), Car-Pass required a faster and more reliable tool to generate certificates and other PDF documents, based on templates adjustable by the end-user. This solution should minimize footprint (PDF size) and come with a transparent and affordable license.

So the main goals were:

- Handle the speed and volumes required for processing mileage and delivering Car-Pass certificates.

- Use the reliable and high-performance PDF library to build the business critical PDF document generation requirement including dynamic PDF templates and QR codes.

SOLUTION

After comparing tools, suites and platforms versus different Application Programming Interfaces (APIs), Roots Software selected iText as the perfect solution for the Car-Pass system needs. Several characteristics of iText were the deciding factors:

Lightweight – iText did not require any large applications, servers or manuals to engage. Coding with iText can be very concise, with clean and efficient code.

Powerful – iText gave flexible approaches with full control of PDF structure. It allowed developers to work on a high-level to manipulate documents, or use a low-level API to perform advanced PDF development.

Comprehensive – iText had all the features needed to support QR codes, manage PDF templates with Acrobat Pro, and produce documents that comply with PDF standards in any PDF tool.

Fast and efficient – iText helped manage footprint (from 106 GB to 20 GB savings on internet traffic) and allowed for fast document generation speed.

Scalable and easy to maintain – iText easily integrated in a SOA (even OSGi friendly) and was very low on technical maintenance.

RESULT

Thanks to the SOA based architecture and good implementation of iText, document generation speed improved 10-fold, to under 90 milliseconds per Car-Pass certificate (compared to 900 milliseconds before).
This way, Car-Pass could render up to 10 certificates at the same time, with this improvement, the biggest ROI was achieved through the superb performance for the new Car-Pass system.

The Car-Pass project was completed within deadlines, while achieving all of Car-Pass' critical requirements.
As one of the most comprehensive, actively developed and documented PDF libraries, iText helped cut on development time and build quality custom scenarios with less effort.

ABOUT US

iText is a global leader in innovative award-winning PDF software used by millions of users worldwide to create digital documents like invoices, credit card statements, mobile boarding passes, and more. The iText 7 Core library is available as open source, while commercial licensing provides professional support and release from AGPL requirements. The iText 7 Suite includes a wide range of add-ons for extra functionality, and we also develop iText DITO: a low-code, template-based PDF generator.

iText works and works well. Our customers choose iText because of our world-class software quality, and our reliable, mature, and proven technology. Our PDF solutions can be embedded into the document workflows of various industries and their applications to create and manipulate PDFs, tasks like secure content redaction, encryption, digital signatures, and ensuring documents are accessible and archivable.

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