



# Fast template development for health reporting with iText DITO®

New Ocean Health, a leading software design and development company, uses iText DITO, our new solution for template-based PDF generation, to integrate with their Enterprise Health Management platform.

They use iText DITO to process and format data from their customers' users, populate a report template and then transform it into PDF format.

This case study describes how iText DITO saved them invaluable time and resources.

## **BACKGROUND**

New Ocean Health Solutions is a software design and development company that delivers an Enterprise Health Management platform to address lifestyle management and chronic conditions, the costliest aspects of healthcare.

New Ocean's digitized chronic condition and lifestyle management programs use embedded digital coaching and behavioral science to improve health outcomes and reduce costs of care.

New Ocean's solution also includes a robust customizable rewards-based platform tailored to the culture of each organization and meets user's unique health goals from improved well-being to chronic condition management.

The entire solution encompasses the Bridge, a repository of APIs built for flexibility and endless integrations to connect the disparate parts of the healthcare system.

The Voyage®, New Ocean's user-facing mobile app, provides an unparalleled, intuitive, personalized interface for users to track and manage their health and well-being through 350+ health journeys and chronic care plans.

### The Bridge (PaaS) Platform

The Bridge is an open API (Application Programming Interface) platform, which combines enhanced mobile technology, behavioral economics and third-party integration.

Customers can use their own platform, IT and branding, or they can use New Ocean's own platform which can integrate into existing functions like EMR, billing or HR systems.

Their open architecture platform allows customers to maintain complete control of the user experience within their environment, and they can roll out the entire suite of functionality or choose the parts they want to integrate.

# **GOALS**

- To seamlessly integrate into the Bridge platform and its data sources
- To process and format data from their partners' users to populate the My Path Result template
- To transform the My Path Result report into PDF

### **CHALLENGES**

Their development team investigated various options for producing templates using C# and after learning about iText's powerful API capabilities, wealth of documentation and low overheads, they approached iText to enquire about using the .NET port of iText 7 with the pdfHTML add-on to achieve their goals.

Although this would have been a viable option, we suggested that our newly-launched product iText DITO could be the ideal solution and the features it offered could greatly simplify the development of their systems.

### **SOLUTION**

iText DITO is our enterprise-grade template engine and it combines the proven abilities of iText 7 to mass-produce high-quality PDFs with the powerful HTML to PDF conversion capabilities of the pdfHTML add-on.

However, a crucial feature is that it also provides an intuitive graphical front-end for designing the HTML5 templates that New Ocean Health needed.

Templates can be quickly designed using the WYSIWYG editor to incorporate all the required elements like images, tables, headers and footers etc. In addition, logical functions can also be added, such as dates, currencies and calculations. certificate is then handed off to a separate system to be digitally signed, making it a legally recognizable document that can be used by multiple governmental organizations. In addition, extracts of documents can be quickly and easily verified with the use of a QR code, which is added using iText 7's Core library.

By adding and configuring data binding parameters to templates in the editor, iText DITO is able to take user data stored in the widely used JSON (JavaScript Object Notation) format from their partners' database and uses it to populate fields in the appropriate report template.

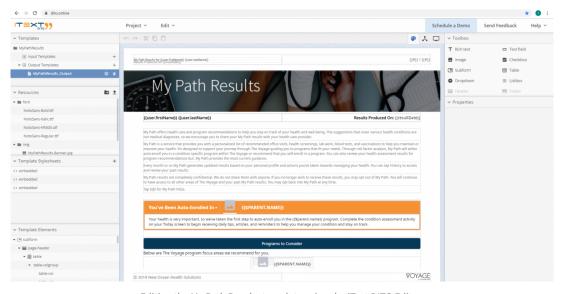
Additional customization can be done using CSS, for instance to apply a specific look and feel for their customers in order to present employees with a report that's styled and formatted with their organization's branding.

All this can be all achieved within the iText DITO Editor without requiring any code, saving time and freeing up the development team's resources to concentrate on other things.

Using the iText DITO back-end SDK, the report can then be converted into a PDF file. iText DITO supports the latest PDF 2.0 specification, and as with all PDFs generated with iText technology, they are standards-compliant and highly compatible.

In addition, and although these features were not required in this case, iText DITO offers unparalleled support for many different languages and complex writing systems, enabling the templates you create to be used worldwide.

With support for compound characters, kerning, glyph substitution, and right-to-left languages, plus advanced typographic features for PDF creation and manipulation, iText DITO has the ability to use special fonts and characters in multiple languages such as Arabic, Hebrew, Hindi, Thai and many more.



Editing the My Path Results template using the iText DITO Editor.

## **RESULT**

From beginning development earlier in 2019, it took just two months to develop their solution. Now, after a month and a half of testing, the system went live in October and is projected to produce 500,000 PDF documents per year, at an average of 3 pages per document.

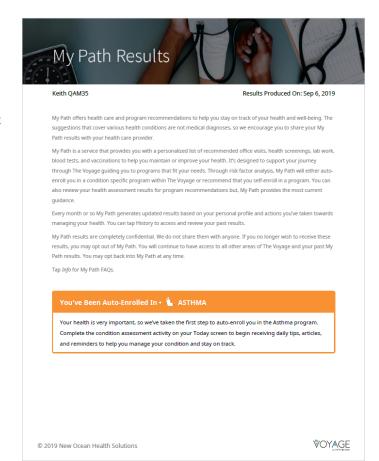
However, it doesn't stop there as there are plans to implement the solution for other user reports, including health assessments and a biometrics report.

"The support we received from iText was invaluable during our development process" said Jeff Humphry, Senior Application Architect at New Ocean Health.

"And, thanks to the willingness of the iText DITO development team, several new features and enhancements were implemented into the product making it even better."

When asked to summarize the benefits of using iText DITO, Jeff cited the WYSIWYG template design editor, the ability to utilize HTML5 and CSS3 elements in the editor, plus the significant improvements over iText 5/iTextSharp enabled by iText 7.

Of particular benefit was the availability of a Docker container for the iText DITO SDK, as this made integration with their own API simple and allowed significant speed improvements for PDF production.



An example page of the My Path Results PDF

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Using the iText DITO Editor to develop our report templates is a huge time saver. I can now do in just 45 minutes what would have taken over two weeks to do in code using other PDF libraries!

**JEFF HUMPHRY - SENIOR APPLICATION ARCHITECT** 





# ITEXT DITO HELPED WITH THIS PROJECT, COULD IT HELP WITH YOURS?

iText DITO is a data-driven, template-based PDF generator that simplifies the process of creating and maintaining PDFs. It offers an intuitive visual template designer, a powerful REST API for processing and production, and with the release of iText DITO 2.0 we've introduced the new iText DITO Manager to handle user, template and resource management.



LEVERAGE DATA WHEREVER IT RESIDES.





MASS-PRODUCE STATE-OF-THE-ART PDFS.



EMPOWER BUSINESS USERS TO OWN THEIR DOCUMENT TEMPLATES.

### SCHEDULE A DEMO

When you request a demo, a specialist will contact you within two business days to inquire details and set up a time for the walk-through. The link for the demo will be sent to you shortly after submitting your request here. If you did not receive it, check your "spam" or "junk email" folders.



Scan the QR-code to schedule a demo.

### **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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