iText DITO v. 1.2

Release Preview Guide

December 2019

Disclaimer – This Release Preview Guide contains highlights that are expected to be included in the next minor release of iText DITO. It is not meant to be complete, nor does it guarantee that all of the listed items will be fully implemented.

Introduction

We are excited to announce the general availability of iText DITO v. 1.2. This latest release of iText's template engine contains several new features and optimizations of existing capabilities, all targeted towards the realization of iText DITO's mission: to provide a high-convenience PDF generation product that combines WYSIWYG template design in the browser, with a powerful PDF generation engine built to handle enterprise-level requirements and volumes.

Convenient Design

Convenience is really key to the 1.2 release of iText DITO. On the template design editor side, several things that were only possible via CSS coding in earlier versions are now available as properties or commands in the user interface. Gradually, more CSS-only capabilities will become available as ready-to-use UI functions and wizards.

Containerization

On the SDK side, we have provided more convenience by creating a Docker wrapper for the iText DITO SDK. Not only does the containerization allow for more convenient deployment and scaling, it also provides developers with a convenient web API that is straightforward to call and agnostic of programming languages.

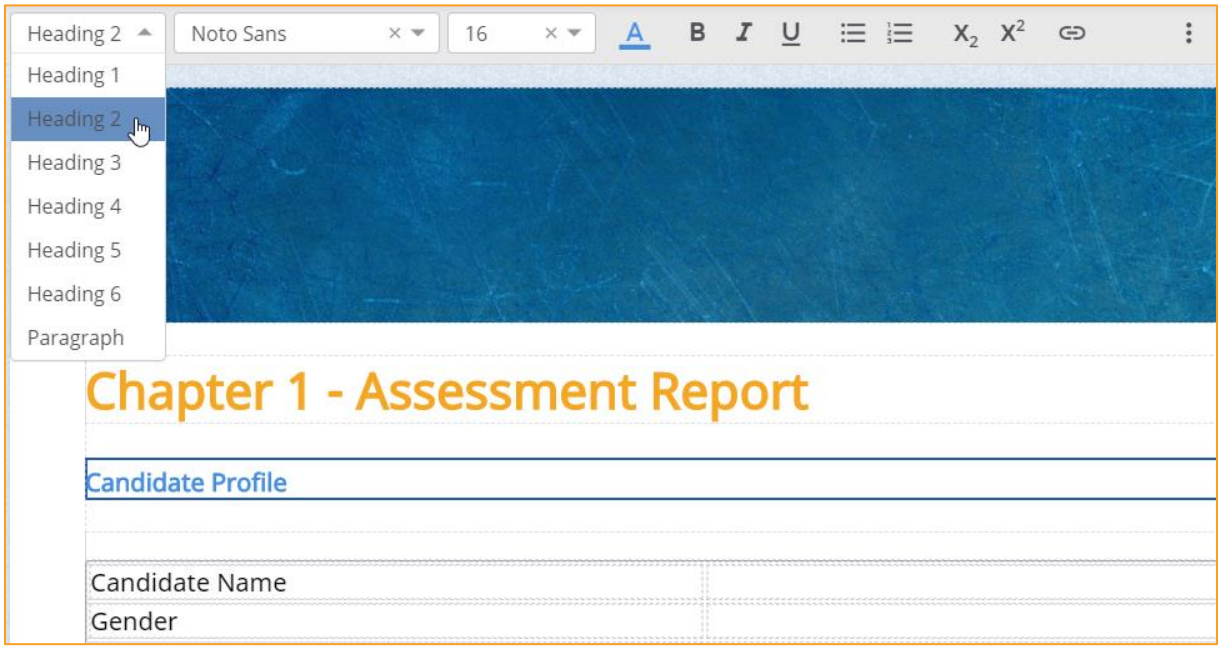
Contents

iText DITO Editor Enhancements

Several design elements that were only available at a style sheet (CSS) level in the earlier versions, are now available as properties or command buttons in the graphical user interface.

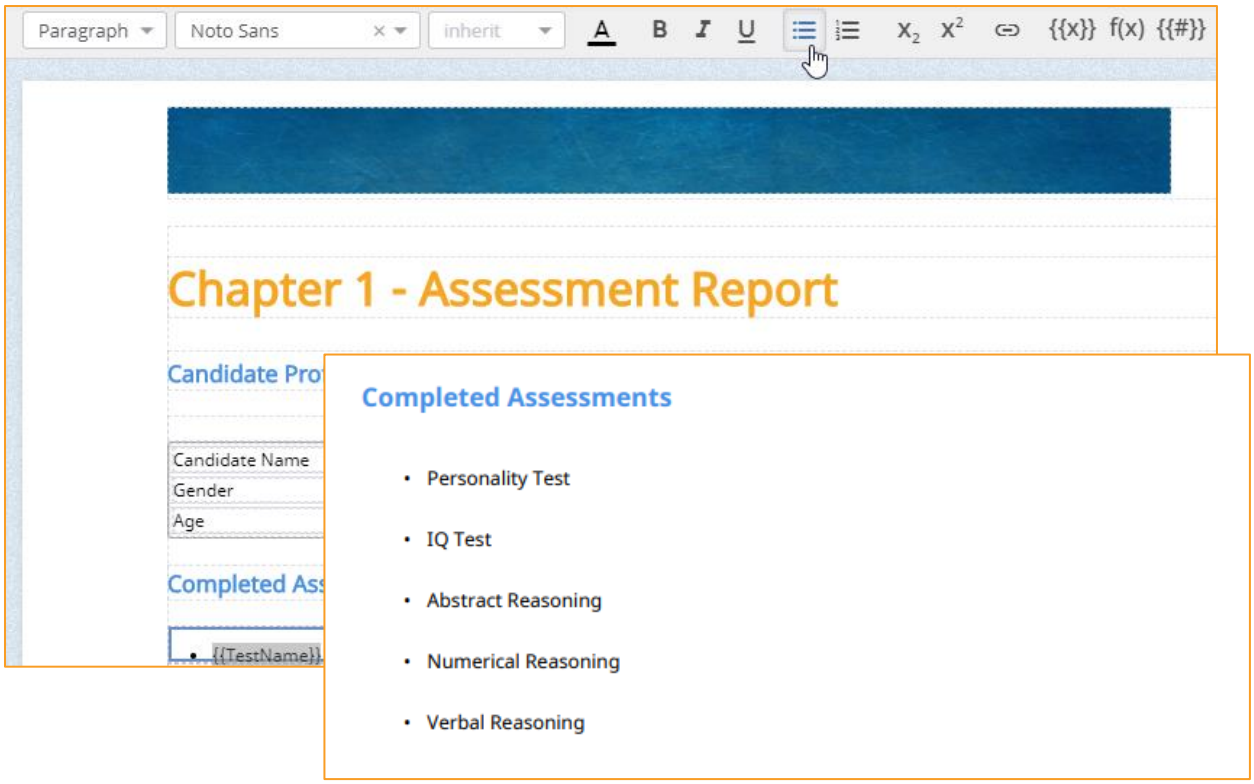
Support for Headings

Any text inside a rich text element can be selected and marked as a heading in iText DITO v. 1.2. By default, the template design app supports 6 heading levels. All items marked as headings in a template will also be headings in the structure of the resulting PDF files.



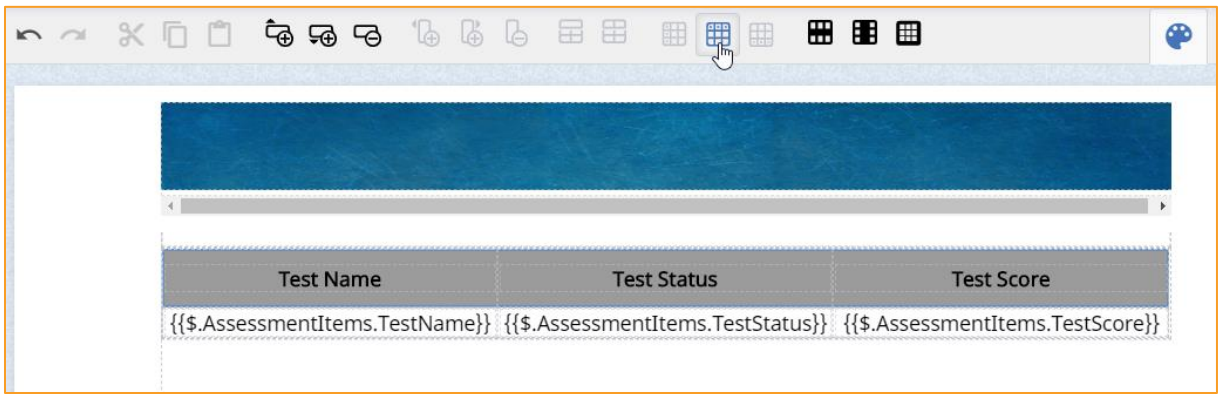
Support for Lists

The iText DITO Editor now also has a toolbar control for numbered and bulleted lists. Any part of a rich text element can contain a list with items. Lists can also be built dynamically by formatting an iterating data binding as a list item. The list will contain as many items as there are iterations of the mapped element in the data set.



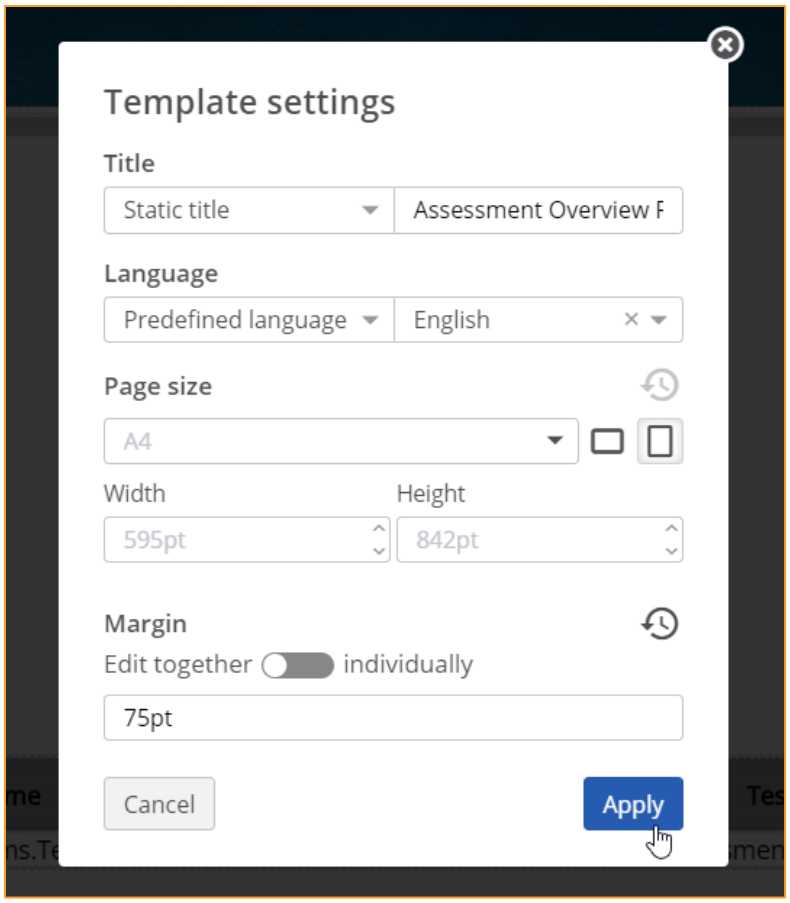
Support for Table Headers

In the 1.2 version of iText DITO you can mark a table row as header row or a column as a header column. This feature is mainly important for compliance with accessibility standards such as PDF/UA. It helps assistive technology (such as screen readers for instance) to read and interpret data presented in a table.



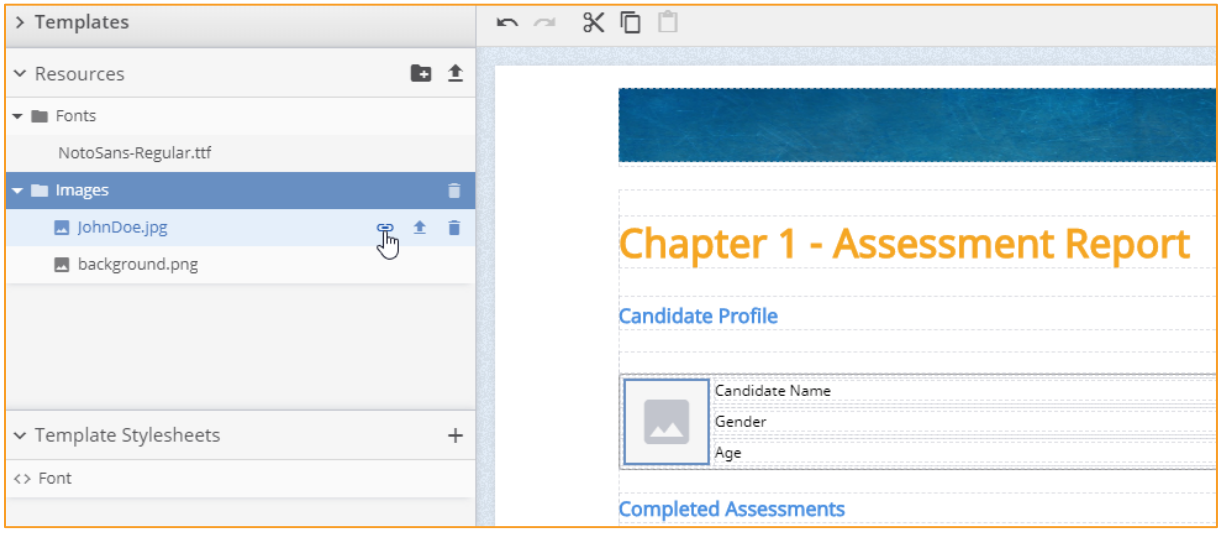
Page Size and Margins Settings

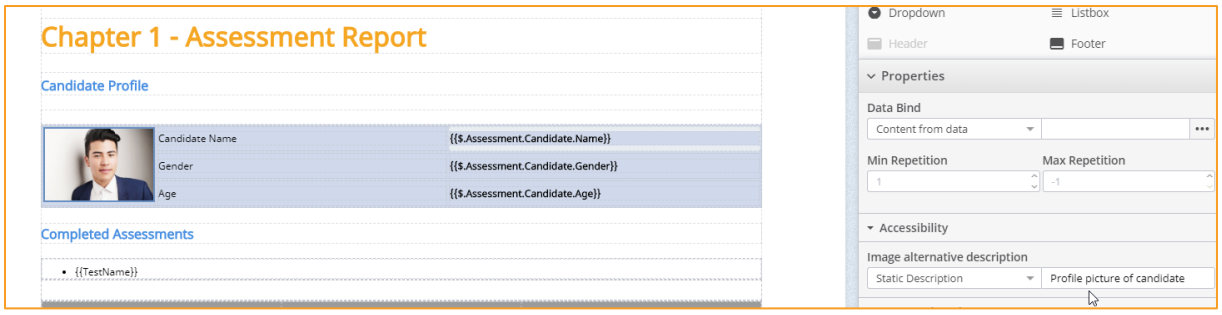
In version 1.2 of the iText DITO Editor you can easily set margins and other settings for your template. The template settings dialog contains presets for common page sizes, both in portrait and landscape orientation. Meta data properties of the resulting PDF documents, like the document title and language property can also be managed in the Template settings dialog. The template settings are accessible through the gear icon next to the template name in the top-left template pane.



Optimizations for Image Insertion

The 1.2 release of iText DITO contains improvements for static or dynamic insertion of images. Images that are uploaded as project resources, can be easily linked to image placeholders in the template by a simple click on the link icon next to the image resource name in the project resources pane. Moreover, images can now also have an alternative text description (alt). This allows for assistive technology like screen readers to describe what the image displays.



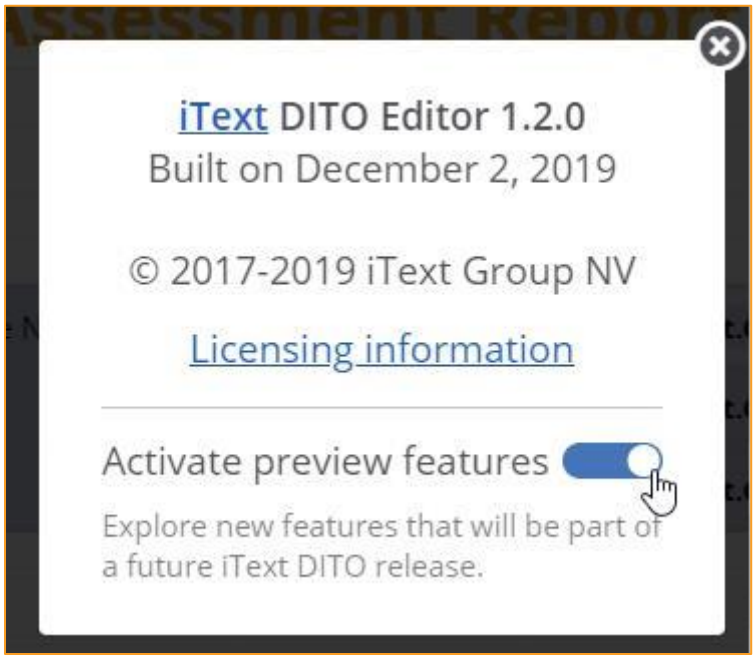


Feature Preview Mode

The release cycle of iText DITO contains three feature releases per calendar year. These feature releases – also called "minor" releases – introduce new functionality to the product. They bump the minor digit of the version number (e.g. this release is iText DITO v. 1.2, the next feature release, planned for March 2020, will be iText DITO v. 1.3). In between these, there will be patch releases that mainly contain bug fixes and minor improvements. These patch releases bump the third digit of the version number (e.g. we might launch patch releases called 1.2.1, 1.2.2, etc.).

To already give you preview access to some of the features planned for the next feature release, the iText DITO Editor now contains a feature preview mode. It may be helpful to activate this mode in a test or development environment to familiarize yourself with expected new features before they become generally available. We discourage to use preview features in a production environment as forwards compatibility of templates created in preview mode is not guaranteed.

You can activate the feature preview mode of the iText DITO Editor via the "About" section of the Help menu. The features that will be available in preview for the 1.2 release are listed further on in this Release Preview Guide.



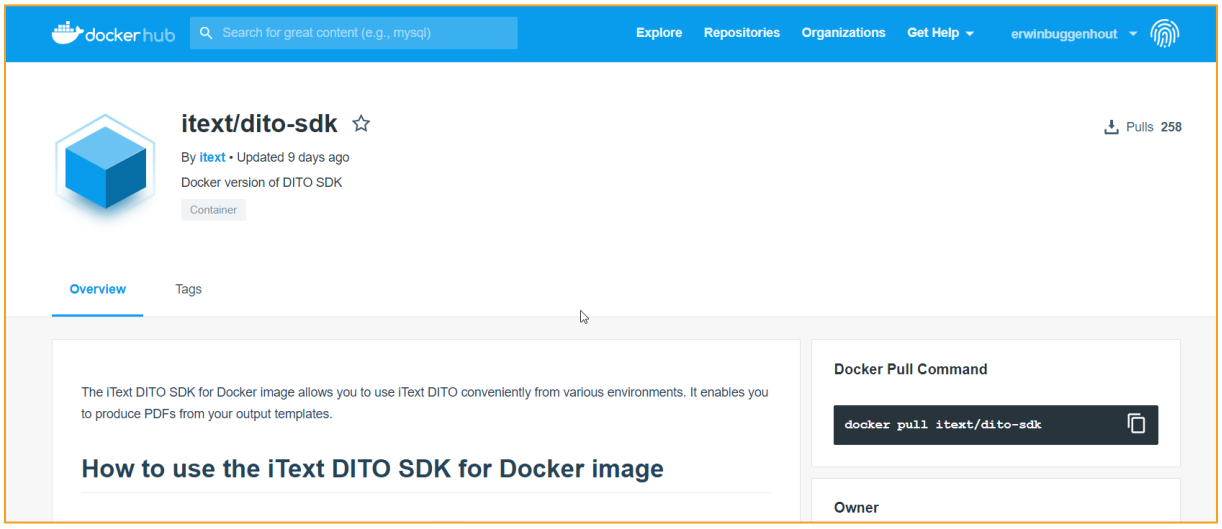
iText DITO Docker Image

From a deployment perspective, a Docker version of the iText DITO SDK is available as an alternative to the standard deployment on a Java virtual machine or the iText DITO command line interface application. The Docker container comes with a RESTful API, which is a wrapper around the Java SDK, that can be called directly with a JSON payload to produce a PDF document from a template.

Deploying iText DITO in self-contained instances such as Docker containers has several advantages, including among other things:

- convenient deployment on any type of carrier (regardless of hardware infrastructure or operating system);
- straightforward scaling; and
- programming language-agnostic interfacing (RESTful API).

The Docker image of the iText DITO SDK is available on Docker Hub. In addition to the pull command, the iText DITO Docker Hub page provides documentation and practical examples on how to call the web API.



Features in Preview

The following features will become available in preview mode in the upcoming weeks. They will be generally available as part of the iText DITO v1.3 release planned in March 2020.

PDF/UA Compliance Validation

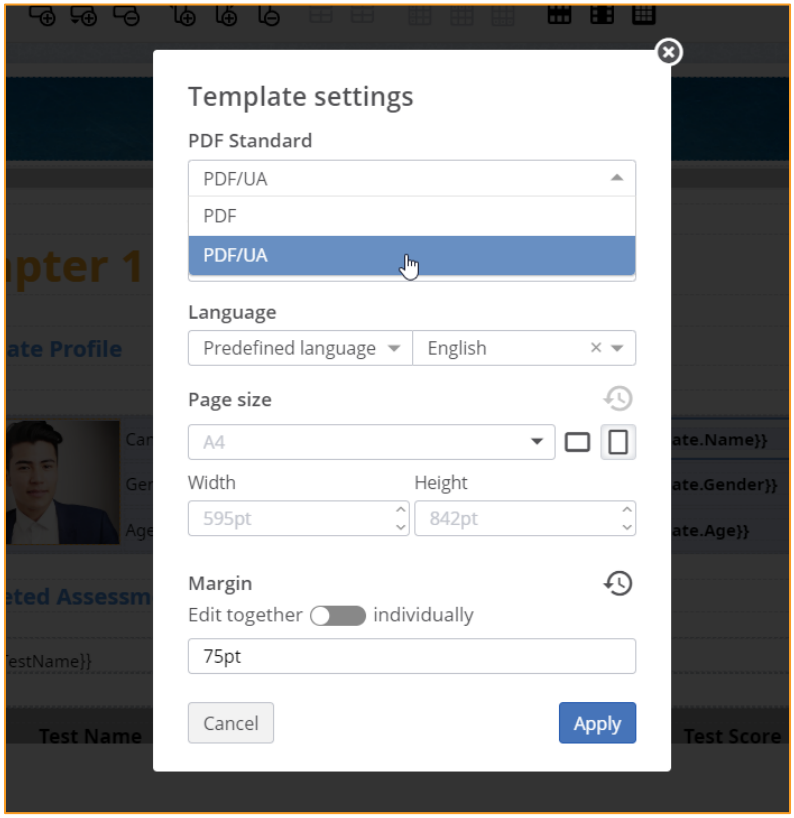
PDF/UA (PDF/Universal Accessibility) or ISO14289 is the international standard for accessible PDF technology. It is a specification that sets a number of requirements PDF documents must meet to ensure that assistive technology (such as screen readers or magnifiers) can work optimally with the document. Documents that meet the PDF/UA standard comply with WCAG2.0 and Section 508, the US policy on accessibility.

In iText DITO 1.2 Feature Preview Mode you can indicate in the template settings that you aim to let the resulting documents comply with the PDF/UA standard. This setting activates PDF/UA compliance mode, which will help you achieve compliance through a range of property settings and validation checks.

iText DITO will automatically execute validation for the following PDF/UA requirements and suggest actions where needed:

- Content descriptions must be specified for all images.
- Descriptions must be specified for all textual hyperlink targets.
- A document title must be specified.
- A default document language must be specified. It should be the natural language in which the title and the majority of content is written.
- Meaningful row and column headers must be tagged as such in tables.
- Meaningful chapter headings must be tagged as such. Headings should be structured logically and there shouldn't be any gaps in a descending heading sequence.

Not all PDF/UA requirements can be automatically validated, so human intervention will still be necessary to fully guarantee PDF/UA compliance. For more details and for a full description of the ISO 14289 specification, please visit the ISO website.



The PDF/UA compliance validation will become available as a preview feature in January 2020.

Knowledge Base

The iText product team is in the process of improving and expanding the documentation for iText DITO. The documentation will be accessible via a searchable online knowledge base and contain detailed instructions on how to install, configure and use the iText DITO Java SDK, the Docker wrapper and the iText DITO Editor.

In addition to manuals, the knowledge base will contain release notes, frequently asked questions and trouble-shooting articles. In the meantime, the following support resources are available:

- iText DITO whitepaper;
- iText DITO tutorial videos;
- Interactive support (for customers and partners holding active maintenance entitlements).