

Definiens Tissue Studio 1.1.0

Release Notes

DEEPER INSIGHTS
FASTER RESULTS
BETTER DECISIONS

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Imprint and Version

Document Version Tissue Studio 1.1.0

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Dear User,

Thank you for using **Definiens** software. We appreciate being of service to you with image intelligence solutions.

At Definiens we constantly strive to improve our products. We therefore appreciate all comments and suggestions for improvements concerning our software, training, and documentation.

Feel free to contact us via web form on the Definiens support website
<http://www.definiens.com/support/index.htm>.

Thank you.

Legal Notes

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Protected by patents US 7146380, US 7117131, US 6832002, US 6738513, US 6229920, US 6091852, EP 0863485, WO 00/54176, WO 00/60497, WO 00/63788 WO 01/45033, WO 01/71577, WO 01/75574, and WO 02/05198. Further patents pending.

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Overview

Definiens TissueStudio™ is an image analysis workstation that provides functionality to support the pathologist in analyzing standard assays in histopathology. It enables non-technical users to configure, calibrate and execute versatile image analysis workflows. The software supports all major acquisition devices and users can analyze all kinds of tissue slides, tissue microarrays and microscope images.

With the built-in Definiens Composer Technology™, regions of interest can be extracted from images by selecting samples and train the software how to find the regions of interest. Once the training is finished, Definiens Tissue Studio™ can extract the regions from an unlimited number of images.

A library of pre-defined image analysis solutions for typical every-day problems is provided that can be calibrated for the particular image data set, using Definiens Composer Technology™ and/or simple graphic sliders. These calibrated applications can be saved and submitted for batch execution.

Definiens TissueStudio™ allows the user to quantify IHC, fluorescence and other histological assays on a cell-by-cell basis.

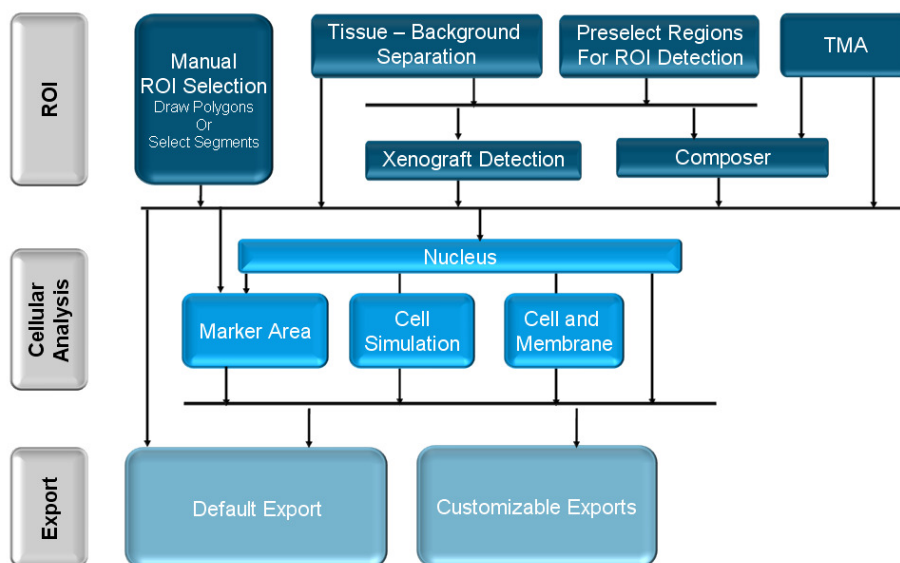


Figure 1: Definiens Tissue Studio image analysis capabilities

About Definiens Tissue Studio 1.1

Definiens Tissue Studio 1.1 is a minor release for all customers running with Definiens Tissue Studio 1.0. It contains new features and a few bugfixes.

A summary of the most important improvements and bugfixes are detailed below.

Key Features

- Manual Selection with polygon outlining tool on native image resolution
- Preselection of regions for postprocessing with Composer or Xenograft modules
- Exclusion of nuclei and cells based on user-defined criteria
- Changes to exported result files and folder structure
- Use Composer Technology on Tissue Microarrays

Enhancements

Category	Reference	Description
User Interface	Enh-14498	Image Proxy Server caching status for projects in Workspace window
User Interface	Enh-14653	TMA: Removed Brightness slider, cores are detected based on texture
User Interface	Enh-13272	TMA: Added button "Delete Unmatched" to remove all unmatched cores from project
User Interface	Enh-14456	Incorporate new workflows into solution tree
Action Library	Enh-14480	Introduce Composer Actions for TMA Workflow
Action Library	Enh-14662	Manual ROI Selection: Add Erase functionality
Action Library	Enh-14693	Manual ROI Selection: Add Classify Remains functionality
Action Library	Enh-14459	Tissue BG Separation: Resolution: alert for minimum setting + lower range for higher
Action Library	Enh-14521	New Action: Select Cores for Composer
Action Library	Enh-14542	Manual ROI Selection: Add workspace navigation
Action Library	Enh-14506	Classifications: Add exclusion of objects
Action Library	Enh-14509	Tissue Background Separation: Handle IF slides with black background
Action Library	Enh-14587	New Action: Manual ROI Selection (Draw Polygons)
Action Library	Enh-14590	Composer Training actions: Press of buttons Segmentation and Classification should apply previously trained classifier
Action Library	Enh-14533	Composer: Add message if no Other sample has been selected
Action Library	Enh-14596	Classification: Classification based on feature in Nucleus
Action Library	Enh-14520	ROI Detection should use same resolution for all slides in one batch
Action Library	Enh-14563	TissueBackground: Replace Magnification Buttons with slider
Import	Enh-14549	TMA: Bulk import of metadata via customized import
Export	Enh-14116	Customizable Export: Add number
Export	Enh-14562	Sum up files per workspace, add scene name and ROI ID
Export	Enh-14042	Default Export should show real class names in %, not ROI 1, ROI 2 etc.
Export	Enh-14060	Default Export: export corresponding images into the same folder with different names. Result screenshots that show the same region are exported into the same folder for quick review.
Export	Enh-14571	Customizable Export: Domain statistics to be summed up per workspace

Bug Fixes

Category	Reference	Description
Export	Bug-14561	Statistics of project exports are based on per object data, not per tile data
Action Library	Bug-14388	Xenograft ROI Detection: "Only inside ROI" does not work in some cases

Known Issues and Limitations

Category	Reference	Description
Export	Lim-14781	Domain Statistics (Mean, Min, Max etc.) are not collected into a single file for each workspace in case of small images or TMA.
Export	Lim-14783	In case of TMA and multiple ROIs in Composer, the object variables for cellular objects are not uptodate in case this object was cut by the different ROIs. Appears esp. in case of Markerstain, when larger stain areas are cut by multiple ROI fragments.

Documentation Errata

None

Additional Information

For additional information please contact support@definiens.com