

## Definiens

# Image Miner<sup>®</sup> 2.1 32-bit and 64-bit Edition

**Release Notes** 

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www.definiens.com

### **Definiens Documentation:**

Image Miner<sup>™</sup> 2.1

### **Release Notes**

### Imprint

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#### Thank you.

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## **1** Overview

Definiens Image Miner<sup>®</sup> is a novel and groundbreaking product that integrates image analysis technology with data mining. This allows large datasets to be correlated against therapy responses and patient outcomes: a powerful tool when looking for biomarkers with diagnostic, predictive or prognostic value. It fully integrates with Definiens Developer XD and Tissue Studio products, as well as importing third-party data.

Definiens Image Miner offers the following key features:

- · Enables development of specific image and data mining applications
- Workflow management of automated iterations between image analysis and data mining for high productivity and short development cycles
- Powerful machine-learning algorithms for data mining
- · Interactive visualization of high-volume image analysis results
- Support for development and quality control, with seamless links between data points and their associated regions
- Image mining is scriptable using Definiens Cognition Network Language
- Image Miner offers multiple options for visualizing and analyzing the data extracted from your image analysis, ranging from standard plots to specialist statistical analyses. In addition, it lets you extend your analysis with Definiens algorithms and run data mining operations.

## 1.1 About Definiens Image Miner<sup>®</sup> 2.1

Definiens is delighted to bring version 2.1 of Definiens Image Miner<sup>®</sup> to you. The main goal of this release is making users more productive, accelerating the whole process from digital image to final result. We recommend all customers to update to this new release. Please have a look at these new features:

- 1. Sampling during data import to efficiently cope with large data volumes
- 2. Fast and efficient review of large, whole slide images for quality control and result interpretation
- 3. Smooth integration with Definiens Tissue Studio<sup>®</sup> and Definiens image analysis client products for fast path to final result
  - Direct interaction between products
  - Metadata that is imported into Definiens clients is directly available for data grouping, data visualization and result interpretation
- 4. Introduced new workflow for iterative improvement of results, e.g. to correct for outlier images

# 2 New Features, Bug Fixes and Errata

### 2.1 New Features

See table 2.1 on this page, New Features in Image Miner 2.1.

Category	Reference	Description
Import	20654,20655	New joined import for workspaces from both Developer XD and Tissue Studio, allowing specification about subsampling strategy
User Interface	20353, 20424	Import and display of whole slide review images, if available
User Interface	20436	Image equalization settings can be changed
User Interface	20638, 20639	Interaction between tables and image viewer for project statistics and object statistics tables
Product Integration	20368	Open Tissue Studio workspace from Image Miner
Product Integration	20396	New training set for Tissue Studio workspace can be created from Image Miner

 Table 2.1. New Features in Image Miner 2.1

### 2.2 Bug Fixes

See table 2.2 on the current page, Bugs Fixed in Image Miner 2.1.

Table 2.2. Bugs Fixed in Image Miner 2.1

Category	Reference	Description
Algorithms	19985	Fixed error at ruleset execution of top-most parent process

### 2.3 Known Issues and Limitations

See table 2.3 on this page, Known Issues and Limitations in Image Miner 2.1.

Category Description Definiens Image Miner<sup>TM</sup> 32-bit has a limitation of 2GB of memory. If Memory you need to process large tables (millions of rows), we recommended the 64-bit edition of Image Miner and the corresponding Image Miner Server. Server-Side If the Job Scheduler is not available when using Submit Analysis, Image Processing Miner will make repeated attempts to connect to it. This may cause the client to hang until an error message is generated ("Error: We could not submit the analysis") User interface On some systems, you may hear a noise when using drop-down lists in the Process Editor. You may wish to turn off your system sounds as a temporary fix.

Table 2.3. Known Issues and Limitations in Image Miner 2.1

### 2.4 Document Errata

None

# **3** Additional Information

None.

## 3.1 Contact

If you have any additional questions, please contact your account manager or email support@definiens.com.

## Acknowledgments

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