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Viventis Deep Post Processing Software

Release Notes for Viventis Deep Post Processing Software Version 3.1.4

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Release Documentation for Viventis Deep Post Processing Software 3.1.4

This document describes the 3.1.4 release of the Viventis Deep Post Processing Software for post processing of image data acquired on the Viventis Deep Platform.

Please read this document before installing a copy of this software.

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1. Compatible Microscopes and Technical Requirements

1.1 Compatible Microscopes and Hardware Requirements

The Viventis Deep Post Processing Software 3.1.4 is a release for the Viventis Deep platform. Accordingly, the Viventis Deep Microscope Post Processing is not compatible with data acquired from other microscope platforms from Leica Microsystems CMS GmbH, i.e., Viventis SCAPE. We recommend for offline processing and analysis Leica-supplied CUDA workstations for compatibility and product security reasons. For optimal performance we recommend the Diamond workstation.

1.2 Operating System Requirements

Viventis Deep post processing software 3.1.4 is a genuine 64-bit program and runs on Windows 11 64bit.

1.3 Product Performance and Security Recommendations

For optimal performance and the safety of the product, Leica Microsystems CMS GmbH strongly recommends the installation of/upgrade to Viventis Deep Post Processing Software 3.1.4 for processing and analysis of data acquired on the Viventis Deep platform. Furthermore, Leica recommends the installation of all available security updates and hotfixes for Microsoft Windows. Please check regularly on our Product Security web page to get the latest news regarding product security vulnerabilities and mitigation strategies (if applicable). If you need further information or are not sure about security fixes suggested by a system component manufacturer, please get in touch with us.

2. Viventis Deep 3.1.4 Post Processing Software Release

Viventis Deep Post Processing Software 3.1.4 is a new release version introducing new functionalities and bug fixes.

3. Recommendations

For optimal performance and the safety of the product, we strongly recommend the installation of/upgrade to Viventis Deep Post Processing Software 3.1.4 for processing of data acquired with systems of the Viventis Deep platform.

Updates from version 3.0.0 and newer can be done automatically.

Viventis Deep Post Processing Software 3.1.4 can only open data acquired with Viventis Deep Microscope Control Software 2.2.0.0 or newer.

For opening and processing data generated with older versions of Viventis Deep Microscope Control Software tools used with those older versions must be kept.

4. New Functionalities

Batch Processing & Workflow Flexibility

- Added batch processing mode for processing multiple experiments in a single workflow.
- Added support for selecting specific time point ranges and channels as processing inputs.
- Added optional writing of input datasets during processing.

Performance & Storage Management

- Added an automatic downsampling option for deblur to accelerate processing. Downsampling is used only for background estimation; final deblur is still performed at full resolution.
- Added processed data size estimation and low disk space warnings before processing begins.

Image Analysis & Visualization

- Added support for maximum projections along the X and Y dimensions in addition to existing projection modes.

5. Solved Issues / Solved Restrictions

Processing

- Fixed a crash that could occur when performing image fusion after shading correction.
- Prevented processing workflow steps from resetting when dataset size changed.
- Fixed incorrect tile alignment that could occur when alignment shifts exceeded half of the configured tile overlap.

Licensing

- Fixed an issue where licenses without an expiration date were incorrectly rejected.

Stability

- Fixed a crash when fusing tiles that did not overlap in all views.
- Improved task cache robustness to increase processing reliability and prevent workflow interruptions.
- Fixed a crash that could occur when a processing task was started while already running under another user account.
- Fixed pyramid display issues for anisotropic datasets to improve image visualization accuracy.

6. Open Issues / Restrictions

The following list enumerates the known, unresolved anomalies of Viventis Deep Post Processing Software 3.1.4.

No known open issues.