

Imaging · Microscopy

# VisiView 7.0 New Features

# Standard new VisiView Features:

# Windows 11 support

# Language Support available

Ask Visitron for more information

# Acquisition, GUI: Experiment time prediction

#### **Acquisition Finish Time Forecast**

The estimated finish time information of the currently running sequence is now available in the status bar

Mag=100xT1x Acquire Progre	is: 📃	End: 2024:05:23 09:33:05
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# Acquisition: Assays capability

The new entry type Assay can be placed e.g. below an Acquire entry. It can be configured to load a setting saved from Measure->Object Analysis. This setting can be an AI or a standard filter-based segmentation setting name.



#### Assav

A saved Object Analysis calculation (AI or conventional) can be selected. The result can be reviewed in the Report Result Window or in Microsoft Excel or stored as a CSV file. These store options are only available when Save Sequence to Disk is activated in the Acquire dialog.



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# Virtual Joystick support

#### Stage/Focus : Virtual Joystick

During a LIVE acquisition the stage X and Y and the Focus position can now be moved with the mouse:

Hold the ALT key down, so that the mouse pointer changes to the *Hand* symbol in the Live image. While the ALT key is down, you can move the stage x,y with the left mouse button pressed and moving the mouse.

Focus can be moved with the mouse wheel.

## Storage of Live-Image

#### Acquisition

#### Live Window

You can choose now if you want the LIVE window closing automatically when you stop LIVE (default), or leave the window open.

To select your choice: Check or uncheck Keep Live Window Open accordingly in Configure->System

System Setup X
General Dock Acquisition Display Adn 🗙 🛹
Stream
○No action
O Disable Stream at incompatible settings
ODisable stream + incompatibility warning
Warn but leave stream enabled
Save File
OME Big-Tiff format (64-Bit) 🛛 🔍 🔲 auto
ScanSlide/MultiWell
Use legacy ScanSlide/MultiWell
Optimized order of subregions
Overview Max Size (MPixel): 50,00
Lower Objective
Lower Objective while stage move
Lower Delta: 0 🌣 Zeiss - Foci 🤝
Use Legacy Acquisition
Deactivate disk space check
Use multi threaded data copy
Keep Live Window Open
✓ Use Legacy Custom Acquisition Dialog
OK Cancel

# Custom Acquire: new GUI with graphical Editor

### **Custom Acquisition Dialog**

The legacy layout for the Custom Acquisition protocol setting is line-based text. The new option is a flow-chart layout.

To select your choice: Check or uncheck Use Legacy Custom Acquisition Dialog in Configure->System

AcquisitionTreeDialog	x
Start	Timelapse
↓	Wavelength
Macro ExperimentTimer	ZSeries
Timelapse 2 every 0.00 sec. □	Stage List
	ScanSlide
Timelapse 6 every 1,00 sec.	MultiWell
₩avelength: 1-VirtexΔ0, 2-VirtexΔ2, , , , , , , , , , , , , , , , , , ,	Acquire
	Macro
Acquire Exp: 150 ms,	Loop
	Assay
Macro UV15s	Remove
	Clear
Timelapse 4 every 1,00 sec.	Standard
Wavelength: 1:VirtexA0. 2:VirtexA2	Load
	Save
Acquire Exp: 150 ms,	
Macro Blue15s	
Timelapse 5 every 1,00 sec.	
Wavelength: 1:VirtexA0, 2:VirtexA2	
Acquire Exp: 150 ms,	

# Basler Camera

Pylon V.7.4 is now supported which is required under Windows 11

# New Features for VisiView Options:

# New MultiWell Screening module

#### Multiwell Acquisition

The *Multiwell* Acquisition has been completely rewritten and has a similar style now as the *Scan Slide* Acquisition





Report	t Results	; - ObjectAnalysis	
	#	Source Name	Object Count
⊳	1	Source Name	Object Count
	2	lmage94_HeLa_WellF7_s4 (t=1)	6,0000

# Additional ScanSlide functions

#### Scan Slide: New Features

The overview area can now alternatively be numerically defined. The Area can be locked so that it is not possible to change it by moving the stage.

ScanSlide Configure Dialog			• фр×
Overlap: 10 💠			Calibrate
Show Image		Show externa	I Live Image
Show Z Plane			$\sim$
Show SingleShots			
Overview Scan			
5x			$\sim$
Assay			
Test	V	Output: ViewOn	ly 🗸
Area 🗸 Lock			
X: Low: 10000,00 🌣	High: 20000,00	Ŧ	
Y: Low: 37285,87 🌫	High: 50000,00	<b>₽</b>	

# Triggered single shot sequences with ViRTEx Illumination

With the *Show Single Shots* option, you can acquire a single shot at the current stage position by clicking the Acquire button. The image is shown at the appropriate position in the Overview window. Thus, instead of acquiring the complete overview area it is possible to acquire only certain regions of the overview area.



Moving the stage with the mouse by dragging the stage position icon has been possible only when Live acquisition was running. Now, moving the stage by mouse is always possible.

# Multi-Camera support with different models, resolutions and manufactures

#### **Multi Camera Acquisition**

Is now possible for cameras with different types, even different manufacturers and resolutions. In Configure Camera you can now define multiple cameras even if they are not identical.

Camera Configure		x
Selected Cameras:	2	₽
Camera - Demo		▼ ○
Camera-2 - Demo		
Configure	ОК	

#### Non Stream Sequences with Virtex

Non-stream sequences are now acquired under Virtex control. This means that lasers (LEDs) are now switched on and off with the camera exposure signal. In earlier VV versions, the illumination devices have been switched by software only and thus had been on a while before and after the exposure.

# Frap: Scanning of Thick Lines

It is now possible to FRAP thick lines. The thickness can be selected in the FRAP Configure dialog and will be represented in the image when the Load button has been clicked.

FRAP Configure	<b>-</b> ¶ų φ ×
Selected FRAP Device	
Virtex - Frap #3	✓ Calibrate
FRAP Sequence Parameter	
FRAP Time per Pixel [ms]:	1,00 🌩
Total Sequence Time [ms]:	
Stop Acquisition during FRAP	
FRAP Illumination: FRAP	
FRAP Cycles: 1 🗢 every 1	Timepoints
External Trigger Line Thickne	ess: 6 🌣
FRAP at Mouse Click	
Regions	



# Upgrade RS232 Generic Device: Slider and Position implementation

### **Device Control**

The RS232 Generic Device has been enhanced.

This device allows to custom-define commands for COM devices.

In addition to the formerly supported components *Shutter* and *Filter Wheel* these new components are now available:

### Stage X and Y Position

RS232 Stage Configure X	RS232 Position Command Setup 🗙
XPosition Setup	XPosition
Position [µm]: 0,00 🕸	Initialize Command
micron [µm] motor steps	wait for Answer test
	Ready Command
Motor Speed 65000,0 👄	Ask test
Motor Acceleration 20,00	No
OK Cancel	Moving
	Deli.
	Set
	Speed
	Acc.
	Stop
	Home
	Delay 0 🌫
	wait for Answer test
	OK Cancel

Moving/Get/Deli: There is one field for the return string preceding the return value and one field for the string delimiting the return value

#### Sliders

Defining a custom slider allows you to control e.g. the intensity of a laser.

It can also be used as a dummy slider which can be put on the Control Panel and read out by macro for any use.



# Crest XLight: Emission and Illumination Diaphragm selectable as magnification component

#### **Crest XLight V3**

Emission and Illumination diaphragm can be defined either as illumination or magnification component.

XLightSlider Co	onfigure	x
Illumination D	iaphragm	
Maximum		au 🗸
Wavelength	0 🗘	
0 🌣	<b>9</b>	_
		1000
Mode	Magnification	1 🗸 🗸
ОК		Cancel

If defined as a magnification component then it appears in *Configure->Magnification* dialog as an additional slider element



Multi-camera acquisition is now supported with DeepSim