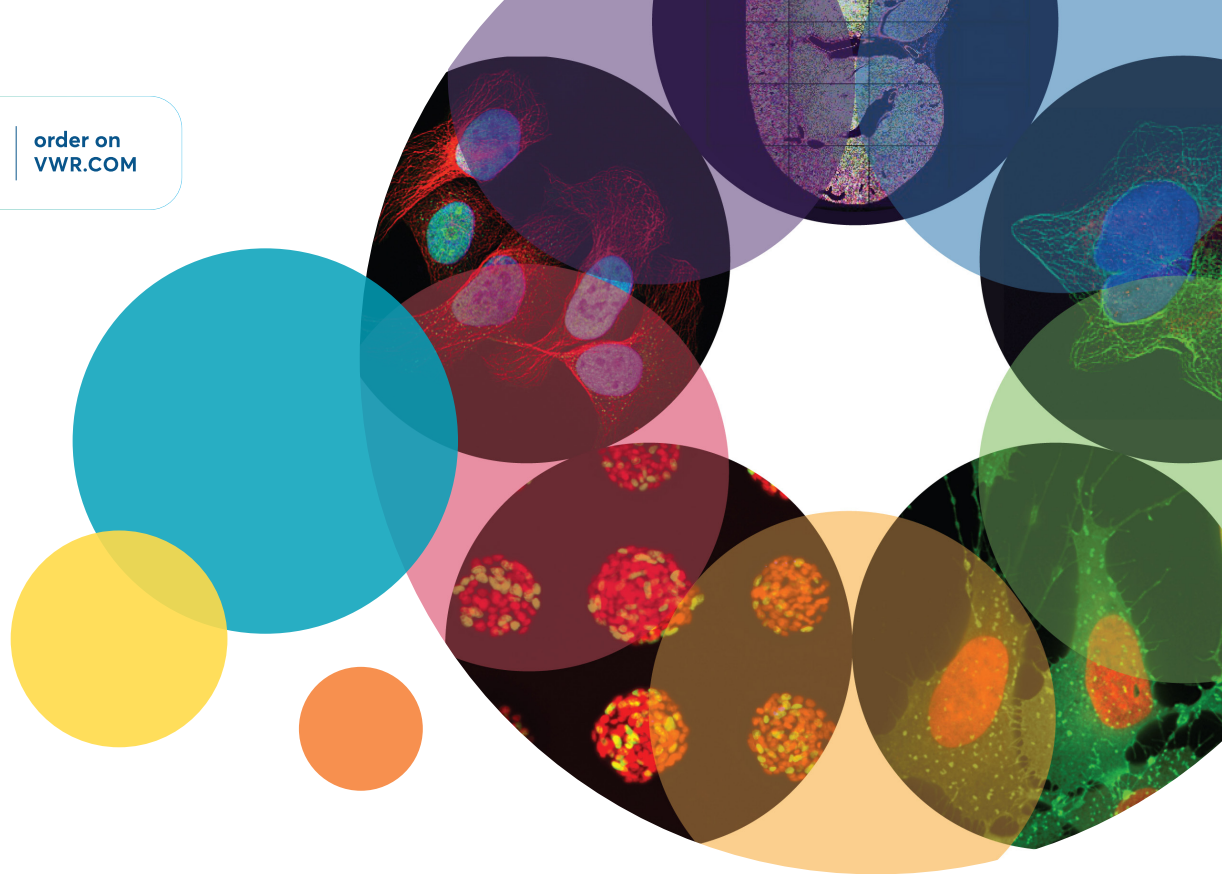


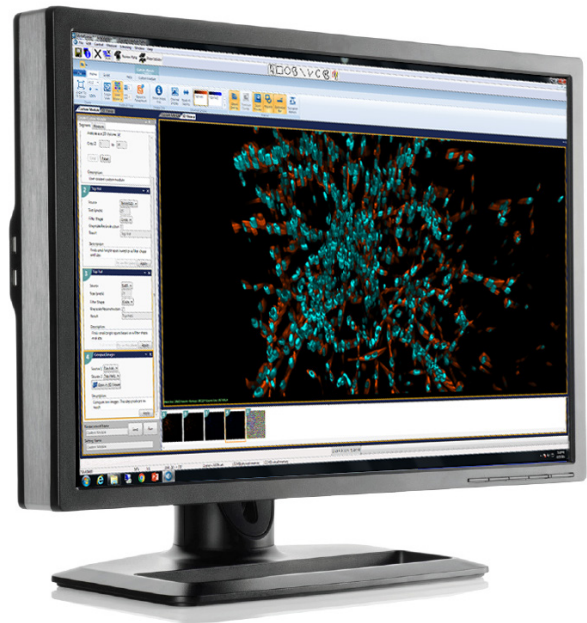
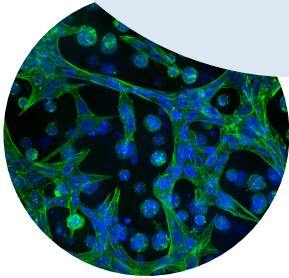


MetaXpress High-Content Image Acquisition and Analysis Software



BENEFITS

- Meet high throughput requirements with a scalable, streamlined workflow
- Adapt your analysis tools to tackle your toughest problems, including 3D analysis
- Run routine modules and custom analyses on parallel processors
- Schedule automatic data transfer between third-party hardware sources and secure database



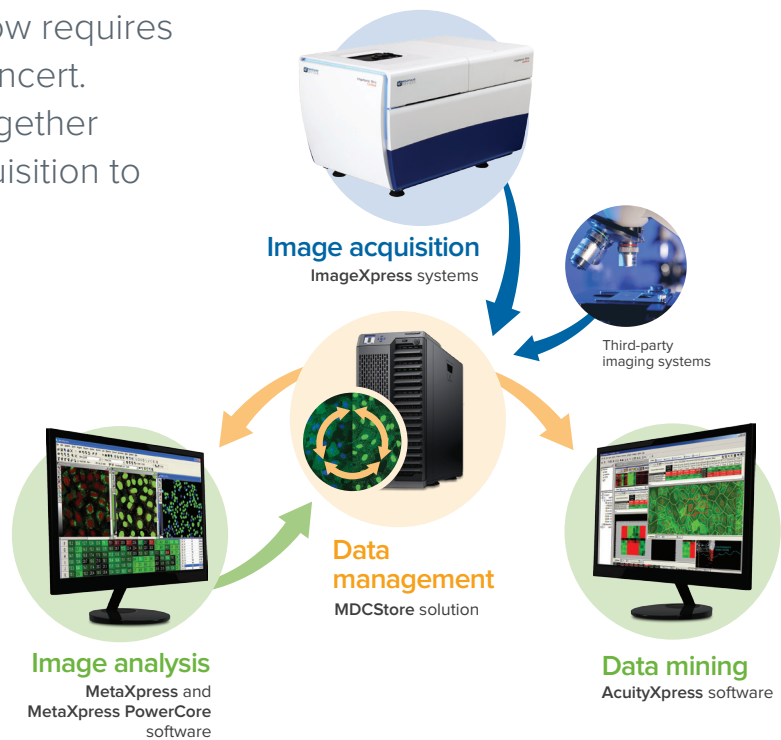
Accelerate your discoveries

Quickly identify and quantify heterogeneous, sub-cellular and multi-parametric responses in diverse biological systems

Capture high-resolution images, recognize and segment objects, calculate parameters, and then translate your information into meaningful data. At Molecular Devices, we're inspired by your creativity to solve research challenges. Our goal is to provide you with the tools that let you build a successful High-Content Screening (HCS) infrastructure. Our MetaXpress High-Content Image Acquisition and Analysis Software is the cornerstone of this infrastructure. It is built on our industry-leading software that has been providing scientists with insights into the world of cellular function for over 30 years. We took our extensive experience with cellular imaging and analysis techniques and put it all in one package, delivering an HCS solution as unique as your research.

An end-to-end solution for screening your most complex biological questions

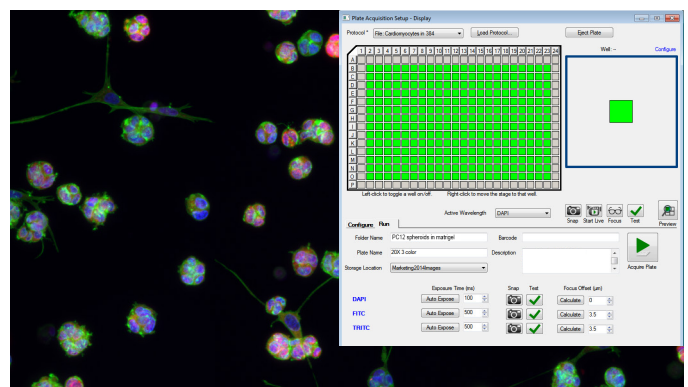
Creating an intuitive HCS workflow requires many components working in concert. Our MetaXpress software ties together every step seamlessly, from acquisition to data management.



Acquire

MetaXpress software offers the precise control you need to acquire images with the best possible quality.

- Capture crisp, high-resolution images using a range of objectives from 1x to 100x at various numerical apertures
- Maintain robust focus across a range of sample types with our easily configurable laser-based or image-based auto-focusing system
- Easily integrate live cell acquisition and quantify 3D measurements of thick samples or kinetic assays using the acquisition and analysis wizard
- Halve your exposure time, or increase assay quality by 30% using the digital confocal option in the acquisition interface



Analyze

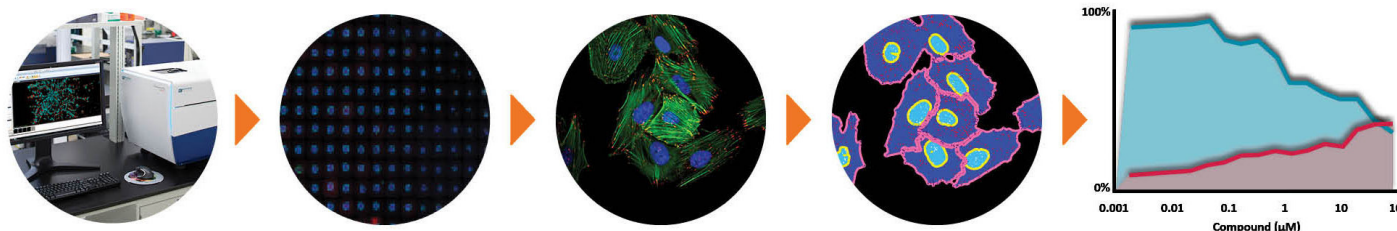
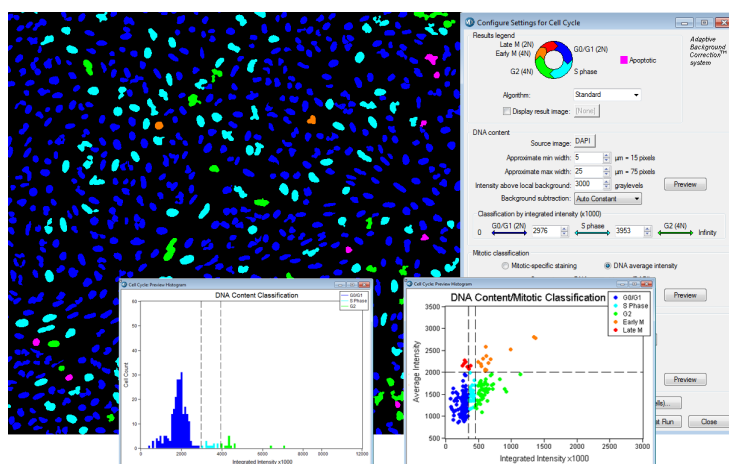
Expedite image analysis and data processing using our MetaXpress software with application modules that allow you to quickly and easily analyze your data.

Modular toolbox

Set up hundreds of routinely used HCS assays whether you're a novice or an expert. MetaXpress software application modules give you an interactive environment to quantify 2D and 3D measurements, including size, intensities, and distance.

Intelligent segmentation

All MetaXpress software application modules are equipped with a proprietary adaptive background correction algorithm, which adjusts image segmentation to the local intensity ranges and shape features within and between cells. This capability gives you the most robust segmentation available in an image-based screening system and improves detection on both phase contrast and fluorescently labeled images. Save analysis results at the cell-by-cell and image-by-image levels with segmentation overlays and review them interactively by selecting a cell and visualizing the corresponding analysis data or vice versa.



Store

MDCStore Data Management Solution and MDCStore Xchange Service provide a seamless solution for storing, organizing, and sharing your valuable data. No extra steps are required to transfer data to MDCStore after acquisition, so you can re-analyze your data without accessing the acquisition system, maximizing the availability of the instrument for further imaging. Save experiment protocols and share them with any ImageXpress or MetaXpress system connected to the MDCStore Data Management Solution to standardize routines in your laboratory or across your organization.

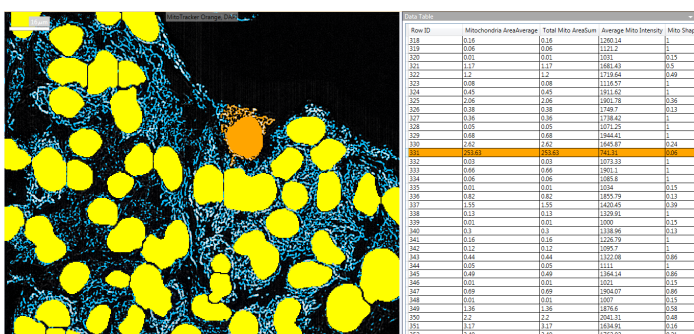
Schedule automatic data transfer between third-party hardware sources and your secure database, and export data to 3rd party and OME compatible files. MDCStore Xchange Service can also be set up to automatically transfer images across two designated locations, making it easy to share data in your file format of choice.

Visualize

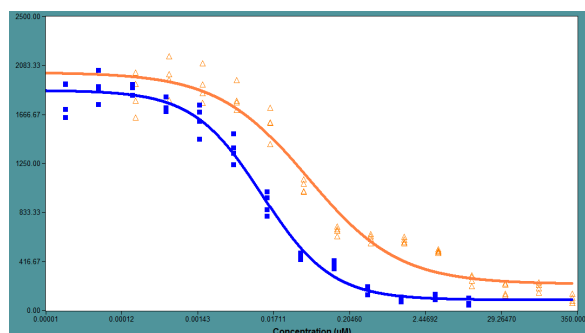
Review your results with ease, minimizing the need to switch between applications by simultaneously viewing image thumbnails and plate heatmaps. Analyze, interpret, and mine data further with AcuityXpress High-Content Informatics software.

Key features include:

- Integration into MDCStore Data Management tool for easy access to needed files
- Bi-directional image viewer that facilitates data quality control by connecting images to numerical data
- Multi-parametric analysis and visualization
- Dose response analysis and curve fitting with over 30 different predefined functions



	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
A																								
B		54.6	86.0	85.3	92.4	106.5	106.4	109.3	111.1	92.7	100.6	96.2	92.8	100.6	341.1	369.9	322.1	349.6	102.1	90.0				
C		11.1	11.1	11.1	82.9	92.5	111.1	111.1	84.9	100.5	111.1	267.1	248.0	302.8	302.8	302.8	302.8	302.8	302.8	302.8	302.8	302.8	302.8	302.8
D		93.8	117.5	91.2	86.3	105.4	97.2	97.2	97.5	104.2	111.1	271.9	308.0	280.0	264.9	100.9	94.6	93.6	111.1	94.6	90.7			
E		11.1	93.1	102.5	109.8	110.0	115.9	107.4	98.5	95.6	96.3	257.8	303.0	263.4	274.5	100.9	98.8	94.0	100.4	95.5	99.0			
F		98.8	94.5	96.9	89.6	104.1	104.5	101.0	97.4	96.9	83.0	227.3	231.4	230.0	167.9	105.4	100.2	102.2	94.9	111.1	102.2			
G		98.8	93.5	102.0	107.8	101.3	100.2	105.1	100.5	96.7	102.6	163.0	182.3	225.8	195.3	95.6	90.9	101.1	96.9	105.6	83.2			
H		99.7	112.1	96.9	109.2	101.7	86.7	101.8	102.2	96.7	89.4	163.5	174.5	150.1	123.1	118.7	112.3	142.9	111.1	111.1	111.1			
I		11.1	94.5	90.8	89.8	111.1	92.4	97.9	98.2	90.1	111.1	109.5	105.9	112.4	92.9	271.7	254.5	223.3	224.8	89.5	111.1			
J		82.5	89.0	94.7	90.1	95.8	82.7	94.5	111.1	111.1	111.1	101.3	96.5	105.2	111.1	245.0	218.1	255.4	245.9	91.3	99.9			
K		11.1	96.1	96.7	92.5	87.9	93.5	98.9	92.5	111.1	111.1	96.6	84.4	83.6	102.3	252.9	236.2	226.3	244.4	111.1	111.1			
L		11.1	111.1	93.8	101.1	111.1	81.4	82.7	64.0	95.3	111.1	97.6	83.0	92.3	111.1	240.9	188.0	239.8	255.5	111.1	67.3			
M		111.1	111.1	111.1	111.1	111.1	111.1	111.1	111.1	111.1	111.1	111.1	111.1	111.1	111.1	111.1	111.1	111.1	111.1	111.1	111.1			
N		111.1	111.1	111.1	111.1	111.1	111.1	111.1	111.1	111.1	111.1	111.1	111.1	111.1	111.1	111.1	111.1	111.1	111.1	111.1	111.1			
O		99.9	100.0	95.5	111.1	111.1	111.1	111.1	111.1	111.1	111.1	111.1	111.1	111.1	111.1	111.1	111.1	111.1	111.1	111.1	111.1			
P																								



Customize

Our solution is scalable and adaptable to fit your ever changing and unique research needs.

Custom module editor

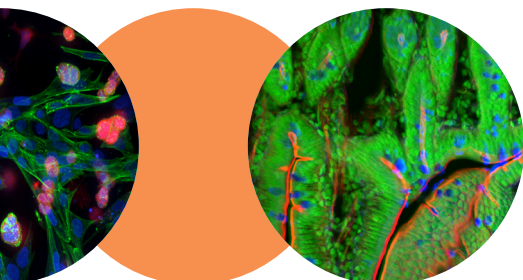
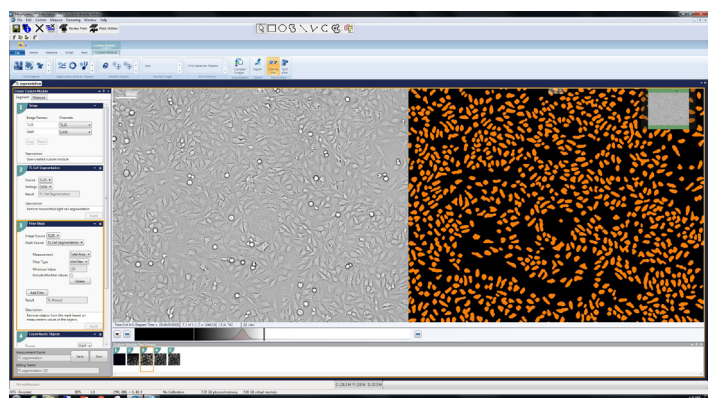
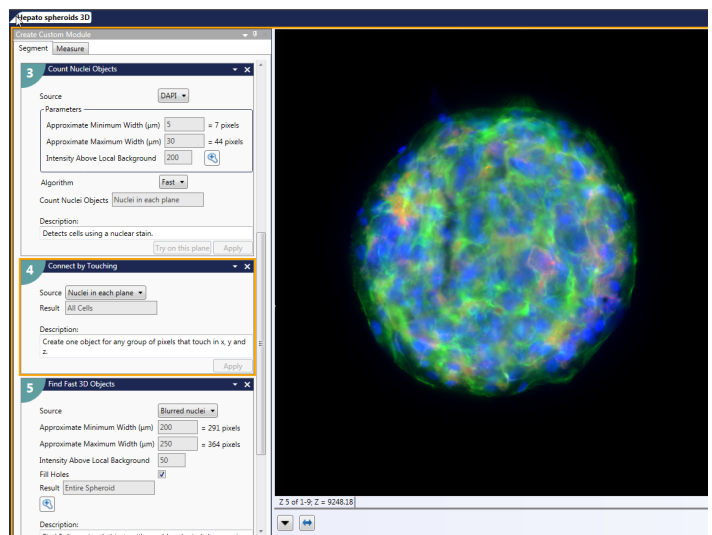
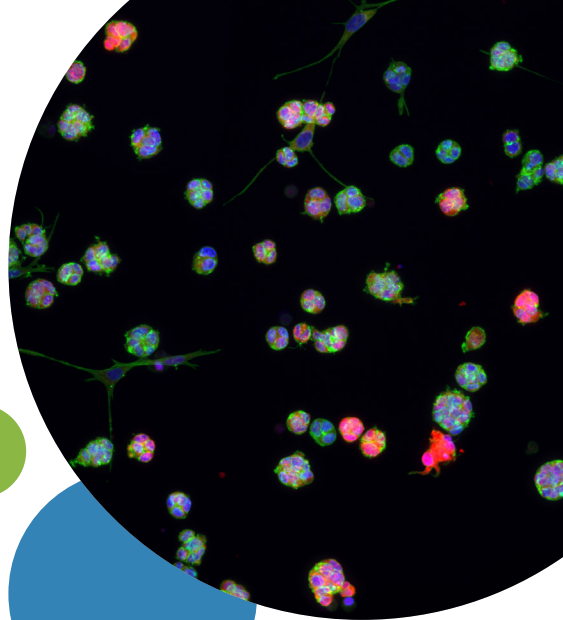
Build specific analysis capability by combining a series of subroutines. With our step-by-step, interactive editor, you can create challenging, multi-step algorithms such as counting punctae in neurite outgrowths, and then running them in minutes using MetaXpress PowerCore software.

3D analysis

Increase the biological relevance of your screening assays with an integrated and seamless acquisition and analysis of 3D data. Simplify quantification of 3D structures with volume, intensity, and distance measurements.

Journals

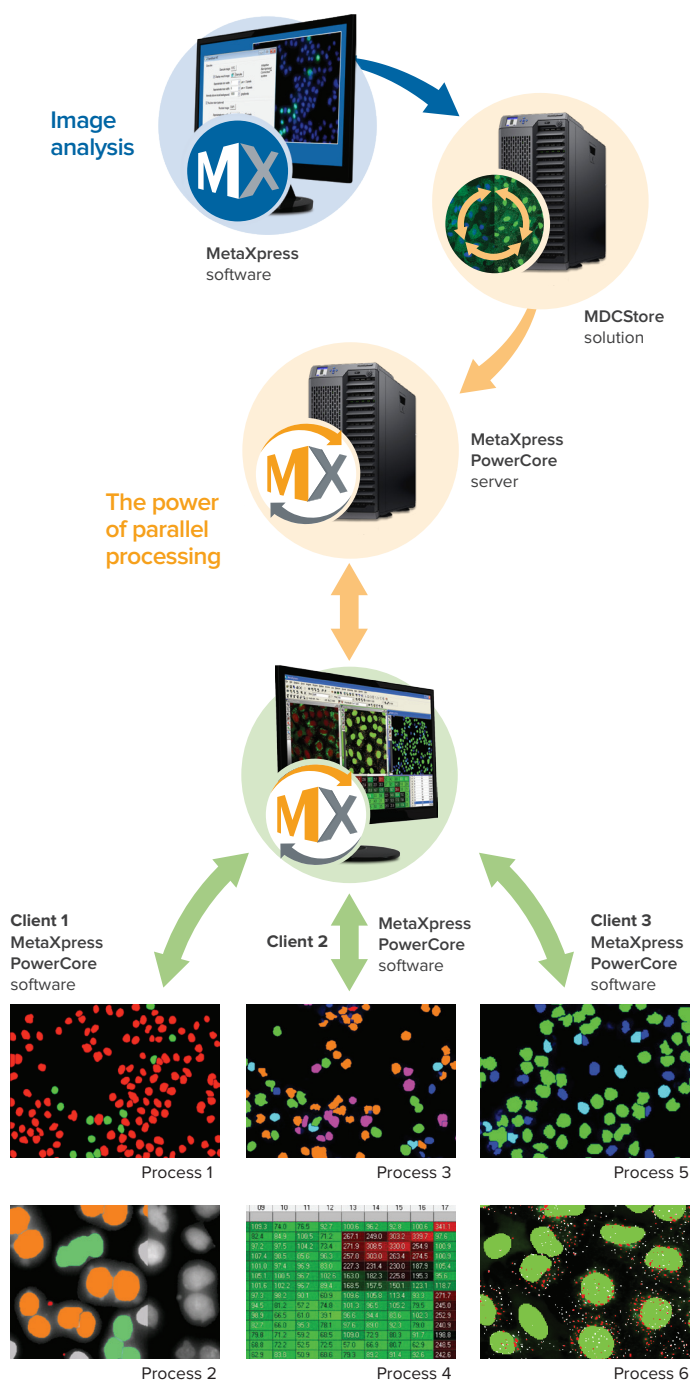
For ultimate customization of acquisition and analysis, journals enable multi-step routines such as whole-well scanning at low magnification and localizing objects of interest. Develop custom journal macros including automatic integration of intelligent hardware control based on your image analysis results.



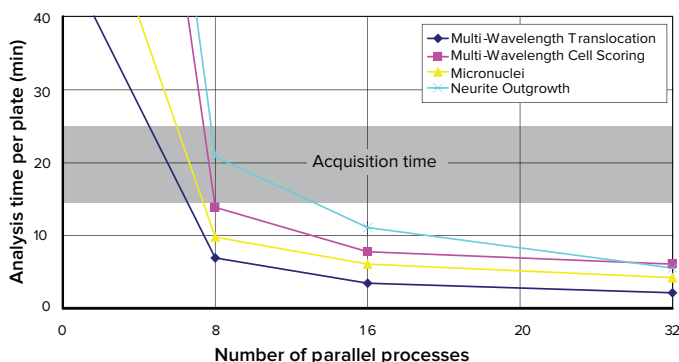
Accelerate

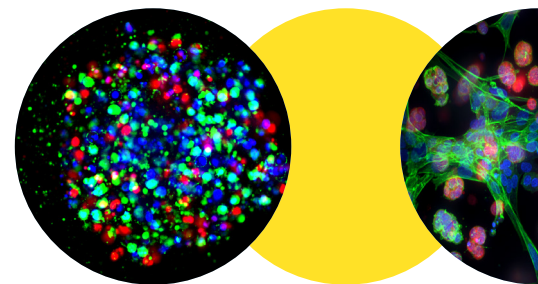
The MetaXpress PowerCore software is a distributed analysis platform with a server that divides plate analysis into small processes and distributes them to multiple clients. Each MetaXpress PowerCore software client, running on multiprocessor computers, executes analysis and relays the results to the server. Built-in flexibility accommodates time and 3D acquired images as well as single plane data. The scalable design accelerates your image analysis at no cost to segmentation quality, overlays, or the large number of analysis outputs. When the analysis is complete, the server efficiently saves all data into the MDCStore database, so results are accessible within your laboratory or across your organization.

Put your HCS capability into overdrive with MetaXpress PowerCore software. Typical basic research or HCS configurations will expedite MetaXpress software application module analysis times by 5x-10x—as fast as acquisition. Using our scalable solution, increase speed further by adding more processors. Core facilities or high-throughput imaging environments can accelerate analysis speeds 10x-40x to support multiple ImageXpress systems running in parallel at full capacity. Similarly, scale up allows re-analysis of archived images at speeds up to 25-fold faster than acquisition.



Analysis faster than acquisition





Ordering information

Our experienced scientific teams are available whenever you have support inquiries, issues, and requests for applications or technical information. When you're ready to take your research to the next level, our applications scientists, trained in the latest technological advancements and assay development techniques, will help get you there.

MetaXpress High-Content Image Acquisition and Analysis Software:

- MDCStore High Content Data Management Solution (included)
- Standard licensing is transferable to the computer of choice
- Network licensing allows multiple users to simultaneously connect to software
- AcuityXpress Informatics Software, data visualization, mining, and hit selection are ready to use upon system installation

MetaXpress PowerCore High-Content Distributed Image Analysis software for high-throughput image analysis:

- Various licensing is available to satisfy multiple parallel processes

Contact your local VWR representative for more information.

Go to www.vwr.com for the latest news, special offers and details of your local VWR organisation.

Austria

VWR International GmbH
Graumannsgasse 7, 1150 Vienna
Tel.: +43 1 97 002 0, Email: info.at@vwr.com

France

VWR International S.A.S.
Le Périgares – Bâtiment B, 201, rue Carnot
94126 Fontenay-sous-Bois cedex
Tel.: 0 825 02 30 30* (national)
Tel.: +33 (0) 1 45 14 85 00 (international)
Email: info.fr@vwr.com
* 0,18 € TTC/min

Sweden

VWR International AB
Fagerstagatan 18a, 163 94 Stockholm
Tel.: +46 (0) 8 621 34 00
Email: kundservice.se@vwr.com

Belgium

VWR International bvba
Researchpark Haasrode 2020
Geldenaaksebaan 464, 3001 Leuven
Tel.: +32 (0) 16 385 011, Email: vwr.be@vwr.com

Germany

VWR International GmbH
Hilpertstraße 20a, D - 64295 Darmstadt
Tel.: 0800 702 00 07* (national)
Tel.: +49 (0) 6151 3972 0 (international)
Email: info.de@vwr.com
*Freecall

Switzerland

VWR International GmbH
Lerzenstrasse 16/18, 8953 Dietikon
Tel.: +41 (0) 44 745 13 13, Email: info.ch@vwr.com

Denmark

VWR International A/S
Tobaksvej 21, 2860 Søborg
Tel.: +45 43 86 87 88, Email: info.dk@vwr.com

Ireland / Northern Ireland

VWR International Ltd /
VWR International (Northern Ireland) Ltd,
Orion Business Campus
Northwest Business Park, Ballycoolin, Dublin 15
Tel.: +353 (0) 1 88 22 222, Email: sales.ie@vwr.com

UK

VWR International Ltd
Customer Service Centre
Hunter Boulevard - Magna Park
Lutterworth, Leicestershire, LE17 4XN
Tel.: +44 (0) 800 22 33 44, Email: uksales@vwr.com

Finland

VWR International Oy
Valimotie, 9, FI – 00380 Helsinki
Tel.: +358 (0)9 804551, Email: info.fi@vwr.com

The Netherlands

VWR International B.V.
Postbus 8198, 1005 AD Amsterdam
Tel.: +31 (0) 20 4808 400, Email: info.nl@vwr.com