



Visual Components 4.8.0.1 Release Notes – 23/01/2024

Bug Fixes

A recap of bug fixes including those reported to Visual Components support.

ID	Description
27237	Interaction with simulation using VC Experience VR does not work
27260	KUKA.Sim AddOn exception when clearing layout
27192	Toggle statement command missing from VC Robotics OLP program editor context menu
27137	Program statements created by Via solver not loaded correctly in some product variants
25756	PTP motion blending not correct when first joint has no motion
25535	Collision detector detects false collisions when geometry has very small triangles
26988	Python API RobotSelectionService.ActiveExecutor fails for custom robot executors

Product Backlog Items

ID	Description
26394	API to access eCat thumbnail images
27246	Improved Japanese translations

API Changes

API Type	Change
.NET	Addition of VcmxHelper class for getting VCMX thumbnail images
.NET	Addition of TargaImageHelper class for reading a TGA image from the given stream into a GDI+ bitmap

Other Changes

- KUKA.Sim Add-On is now included in Visual Components Premium OLP.
 - Note that KUKA.Sim Add-On is only supported in one product at a time. If you have Premium installed and want to use KUKA.Sim Add-On in Premium OLP, you need to manually uninstall Premium first and then install Premium OLP.

Updates to Visual Components Robotics OLP

General Visual Components Robotics OLP Improvements

Description
Multipass fillpass improvements for outside edges
Weld Start motion type used from robot settings
Fixed crash when creating surface path with certain settings
QIF import updates
Application name fixed for some message boxes
DriveDistance and TangentDistance allow negative values
Fixed Group statement missing after layout reload
Zigzag's first start point motion type fix
Improved Japanese translations for VC OLP tools
Fill pass logic fix when reversed
Nozzle search fixes
WPS from XML import fixes
WireSense fixes
Fixes to touchup base/tool

Visual Components Robotics OLP Post Processor Improvements

Description
Yaskawa WireSense fixes
FTP upload fixes for Fanuc, Siasun, Comau
Group upload implemented
Fix for uploaded aux value
ABB weld parameter writer fixes
KUKA upload workpiece positioner category list updated
Yaskawa Euler format implementation
Yaskawa reference point fixes
Yaskawa paint command fixes
Yaskawa fill pass fixes
KUKA download/upload fixes for KSS86
KUKA KRC2 fix for laser welding
KUKA upload crash fix
WireSense updates

Visual Components 4.8 Update Notes – 13/10/2023

Installers Updated

Changes
KUKA OLP is now available for Visual Components Premium
Extended OLP tools are now available in Visual Components Premium OLP and Visual Components Professional OLP

Visual Components 4.8 Release Notes – 06/10/2023

Visual Components OLP

Visual Components OLP is the main feature of 4.8. This means we have now incorporated Delfoi tools, enhancing the application's capabilities.

The full list of product variants:

- Visual Components Essentials
- Visual Components Professional
- Visual Components Premium
- Visual Components Robotics OLP
- Visual Components Professional OLP
- Visual Components Premium OLP

Robotics solver add-on for OLP variants

Automatically solve the problems on robot motion paths with Robotics Solver. These tools can solve many typical problems such as collisions, singularities, joint limit issues and reachability problems. Solver supports process paths, via paths and search paths.

This is available for customers that have the OLP and even then, requires a separate license. This can only be bought as an annual subscription and needs a separate license.

Via Solver

This is a fundamental solver feature and is now available across all product versions. Solver supports via paths and is easy to use and easy to setup to help solve problems in robot motion paths (limited functionality compared to the Robotics Solver Add-on).

Online help

The application help and Python API reference guides are now available online. .NET reference guide and Python 2.7.1 documentation will stay as is. There's a possibility to customize the help location in the configuration file to a local or remote path.

Updated CAD import and export functionality

Slight improvements in performance, new HOOPS 2023 H2 update.

Updated formats:

- ACIS up to 2023
- Autodesk Inventor up to 2024
- Autodesk Navisworks from 2012 to 2024
- CATIA V5 up to V5_6R2023
- Pro/Engineer 19.0 to Creo 10.0
- Parasolid Up to v35.1

Other Improvements

ID	Description
21272	Update the license status when return the commuter license
22356	Introduce .NET license activation/deactivation events
22589	Mark ISimWorld::Import() method as deprecated - ICadReader should be used instead
22865	Change Chinese label for Toggle command
24468	Update PnP arrow in 3D world on component rebuild

Bug Fixes

ID	Description
10658	Ctrl+z does not undo the movement when Move Mode is on "Selected"
13478	Drawing: TextAnnotation does not connect to the selected node
13795	Changing properties created to features through Python API don't rebuild the feature tree
16771	VC application stuck when exporting model with empty line set in debug configuration
17084	Exporting geometry files to DWG sometimes fails
17250	Export Geometry fails sometimes
17537	Error while reading DWG file
17741	Render calls don't respect the simulation step size
20308	New robot statements are not added inside selected scope
20679	Navigation does not work after switching from assembly editor window when using software rendering and RDP
20915	Dimension label is not printed when exporting drawing to PDF
21004	Ambient occlusion shows through material created with python API
21221	Redundant button while closing statistics layout
21237	Annotation height of 0 causes drawing export to fail
21840	DWG file doesn't get imported
22126	Assembly editor shows Ambient Occlusion after locking the screen
22149	Crash when Distribution property has random stream index higher than number of streams
22300	PM - products gets stuck on a conveyor and an exception is raised
22549	Accessing Material Name with Print statement cause Exception
22652	Importing a DWG file fails
22698	Error when saving to folder with non-ASCII characters
22809	Pressing delete when editing flow group name deletes a process group instead
22860	Exception with Process Flow.MaxVisitCount value
22985	Markup text is not displayed correctly when importing model
22987	Property editor for Product Types uses fixed technical names for value type
23035	Exception when a PM process is selected and GetProperty statement executes
23155	Errors occur if multibyte characters are included in the installation path
23156	Deleting a process step changes the order of the properties from which it was copied
23160	eCat search history list is hard to read with dark theme
23161	Behavior with robot positions "Locked To World" isn't correct
23195	Long file names for video export
23378	StatementHelper.GetActiveScopeForExecutor returns wrong routine when switching routines
23380	Products not going to all processes in step group
23448	Dynamic grasp part is not in collision-group

23578	Switching tabs may cause an exception error at connectivity add-on
23609	Problem adding statement to empty scope from Python
23657	Process flow is displayed out of alignment when recording
23658	Backstage print preview without software rendering on remote desktop causes an unhandled exception
23665	Process is executed over MaxVisitCount times
23672	Pinned Program Editors won't update after removing button groups
23688	Export Image action shows file format options which might not be supported
24800	Disabling Product Type filter does not work when OR condition is used

Visual Components Robotics OLP 4.8 Release Notes

New Features

A short overview of what is new.

UI and Licensing

- Comprehensive access to all OLP processes for all users including Arc, Cut, Spot, Surf, Paint.
- Full availability of all robot OLP post-processors for all users.
- Complete OLP functionalities are now presented on the PROGRAM tab.

Path Setup Panel

- Introduction of Lead-in and Lead-out patterns on Path tab for all processes.
- The newly added Lead-in and Lead-out patterns on the Path tab now have rotation capability.

Hover Panel

- The Process selector within the Hover Panel has been enhanced. Notably, changing the Process selection will also modify the button setup on the Program Editor panel.

Program Validation, Path Check, and Simulation:

- Program Validation now supports conveyor synchronization.
- We've integrated a Linear 180-degree check for linear motion into Path Check, Program Validation, and Simulation. This new feature analyses if the robot's joint rotates beyond 180 degrees during its linear motion and subsequently issues a warning if such a rotation is detected.

OLP Extras:

- The Torch Cloud creation and its export functionality have been refined.
- New Features:
 - The Curve Caps tool, designed to create process paths on linesets within the CAD model.

OLP Calibration:

- We've overhauled and upgraded all layout calibration algorithms, promising improved performance and accuracy.

OLP Post-processors:

- Now includes support for IGM laser search.
- Added support for IGM multilayer with the flexibility of choosing not to execute all layers simultaneously.
- Integrated support for Yaskawa conveyor sync.

Other Improvements (from OLP 4.7)

- Tool solver available on Path Setup panel (Automatically Adjust tool angles and offsets to avoid Robot Tool colliding with the Workpiece, keeping the path in Full-Modify mode)
- Fronius WireSense support for Fanuc and Yaskawa
- PMI/MBD – Product Manufacturing Information in path generating
- CREO, xml export available from Creo 9
- Wiscon standard
- QIF standard (via MBDVidia export)