

What's NEW in VCP 9.4.1

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December 13, 2023

Dear VERICUT® User:

Thank you for your continued investment in VERICUT, an important part of your NC programming and machining process!

VERICUT Composites Programming 9.4.1 features several card updates, streamlined optimization, and much more. These changes and more will be described in the following pages. Please take a moment to review what's new and improved in this release.

Maintenance and Licensing Information

NOTE: This software requires VERICUT 9.4 licensing and [Sentinel 9.8.1 License Server installation](#).

To Get a License – use the link below to submit a License Request:
http://www.cgtech.com/vericut_support/request-license/.

Licensing is sent via email only.

VERICUT Composites Programming 9.4.1 runs on 64-bit Windows, and is supported on Windows 10 and 11 computers.

Software maintenance keeps you on the cutting edge - CGTech provides update software to customers with current software maintenance. Your continued maintenance ensures that you have the most advanced verification technology available. If your maintenance has expired, please contact your CGTech representative (<http://www.cgtech.com/about/contact-us/>).

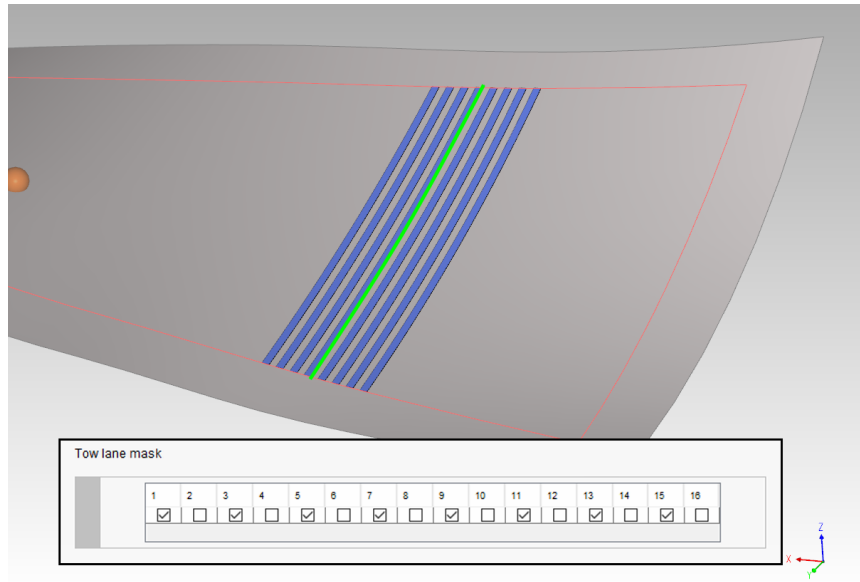
Sincerely,

Olivier Munaux

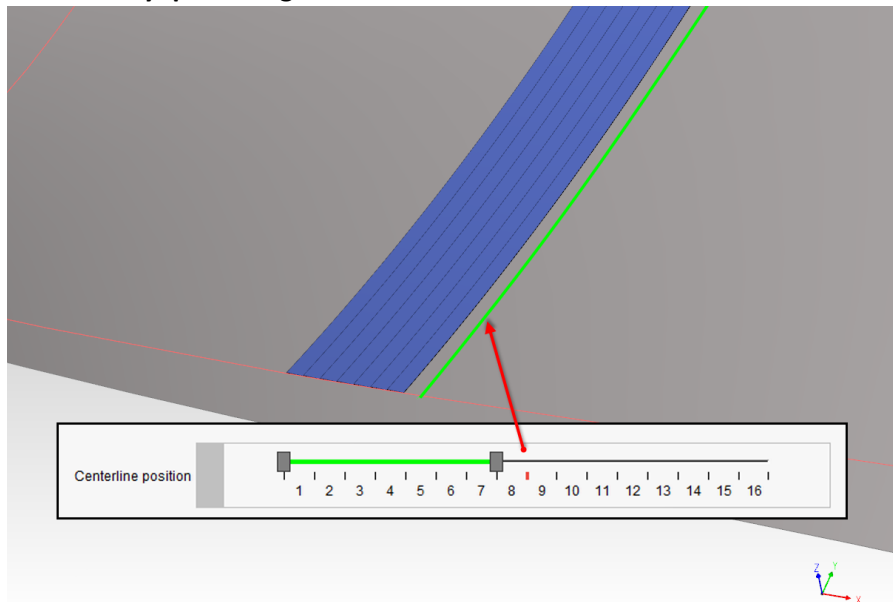
CGTech VERICUT Product Manager

Enhancements in VCP 9.4.1

Added the ability to define which tows are active while laying tape in **Setup -> Head**.

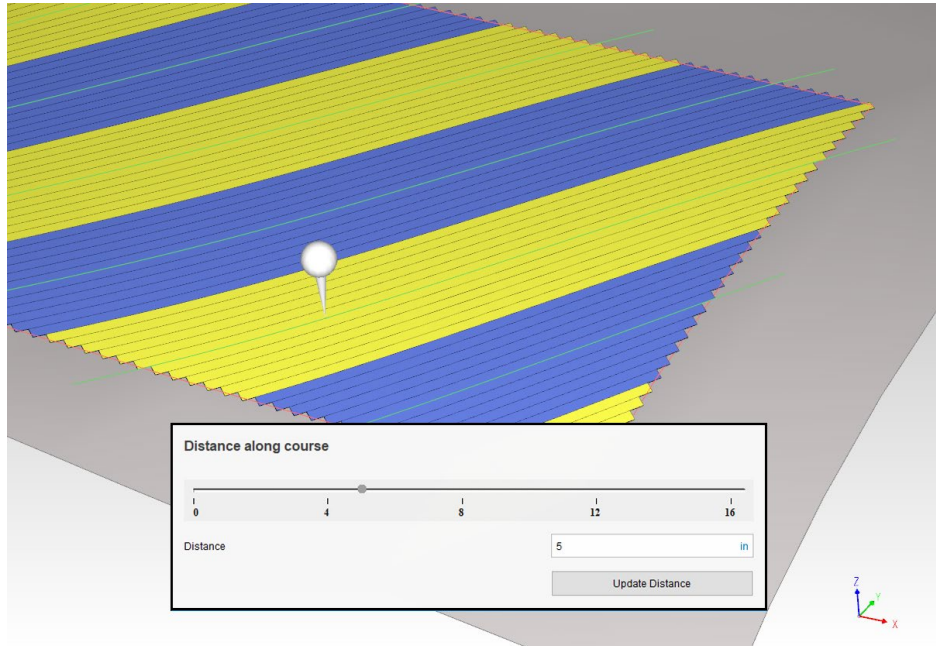


Added the ability to easily define which tows are being laid while generating courses in **Generate -> Courses -> Layup Coverage**.



Added a feature to allow for easier modification of Option Pin locations in **Modify -> Option Pins**.

Release Notes




Added the ability to disable course-course tow trimming in **Setup -> Layup -> Advanced Path Generation Settings -> Do not preform course-course trimming**

Added the ability to Hide/Show batch actions in **Batch Manager ->** 

Exposed the Robot API to the Python Post Processor for Angle <-> Matrix conversions.

Added flexibility when dividing courses with 'n' tows into courses with 'm' tows in **Modify -> Divide**.

Added a flag to **File -> Form Surfaces** to alert the user that an imported surface has been healed.

Added the ability to set linking start point to the end of a course. **Generate->Links->Start Point** 

Refined head reversal logic for more clarity and control when linking.

Added a batch mode to remove all links from a ply.

Temporary visuals (Points, Curves) have been exposed in the Python API.

A triangle was added to the mouse icon in **Tools -> Axes -> Create new coordinate system** to remind users of a hidden *right-click* menu.

Users can now set the transparency of courses to allow boundaries and other geometry to show through.

Start Points are now visible even when they coincide with an existing point.

Updated documentation for Maximum on-form traverse regarding wide tape.

Updated VCS training sessions for version 9.4.

Updated VCP training sessions for version 9.4.

Problems Resolved in VCP 9.4.1

Resolved an issue where ATL fiber compaction was not being displayed properly.

Resolved an issue preventing single tows from being properly rendered.

Fixed an issue preventing some STEP files from being imported.

Added an error message when attempting to import unsupported CAD models.

Fixed an issue preventing proper ATL course generation in some instances.

Resolved an issue with Laser Inspection files when using ATL.

Resolved an issue preventing “Insert pin every...” from working on ATL courses.

Resolved an issue where head normals were not being calculated properly during lead in/out in rare circumstances.

Fixed an issue causing poor trimming of wide tape to a boundary.

Resolved an issue causing a crash while running the “Determine Stagger Point” batch action.

Fixed an issue with overlapping cut geometry in ATL.

Issues with ‘remove on-part scrap cuts’ have been resolved.

An issue sorting boundaries with long names in the Layup Coverage card has been resolved.

An issue causing incorrect course angle generation in ATL when using a 0.0 Minimum course-course gap has been resolved.

An issue with incorrect Steering Radius analysis “heat” map coloring has been resolved.

An issue preventing courses from being generated on a dome part has been resolved.

An unexpected exit caused by generating ATL courses with more than 1 tow has been resolved.

An issue causing missing surfaces when exporting ATL surfaces has been resolved.

An issue causing unexpected results when extending ATL courses to full width has been resolved.

An issue causing side cuts to be removed when breaking ATL packet to courses has been resolved.

An issue causing unexpected results when cutting ATL courses to a boundary has been resolved.

An issue preventing the Steering Radius measurement pin from being displayed has been resolved.

An issue causing twisted surfaces when exporting ATL surfaces has been resolved.

An issue causing incorrect Roll Center offset motion has been resolved.

An issue preventing the Distance along course function to work in the Contour card has been resolved.

An issue with ATL Query to gap analysis has been resolved.

Updating links no longer reverts head paths defined as links.

ATL Option pins now correctly post on Lead-ins and Run-outs.

Release Notes

An issue with ATL roller compaction visualization has been resolved.

A bug preventing islands to render properly when using ATL has been resolved.

An issue where VCP was missing some collisions has been resolved.

Issues with 'create on-part scrap cuts' have been resolved.

An issue when restoring all original cuts has been resolved.

Issues with 'remove on-part scrap cuts' have been resolved.

An issue with poor trimming while using 'cut all courses to the selected boundary' has been fixed.

An issue causing crashes when using 'cut all courses to the selected boundary' has been fixed.

An issue with ATL gap analysis has been fixed.

An issue causing poor trimming when exporting CATIA files in batch mode has been resolved.

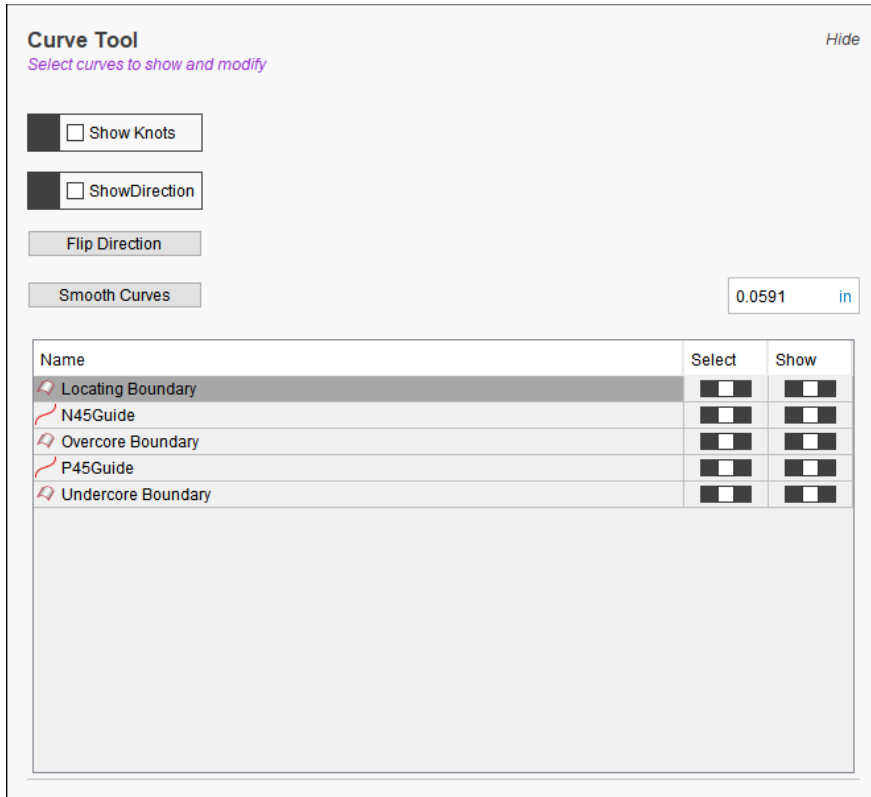
An issue which generated an incorrect error message when using 'make full width' has been fixed.

Issues with 'create on-part scrap cuts' have been resolved.

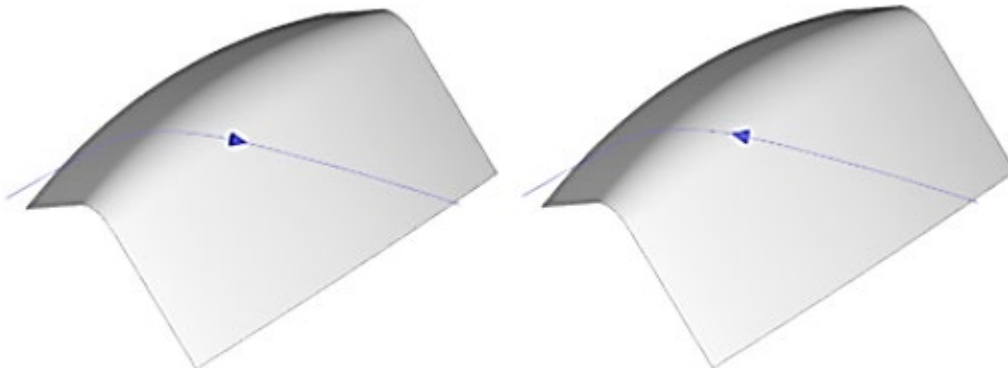
VCP 9.4 Release Notes

Enhancements in VCP 9.4

Added a new Curve Card to allow users to display and modify curves.

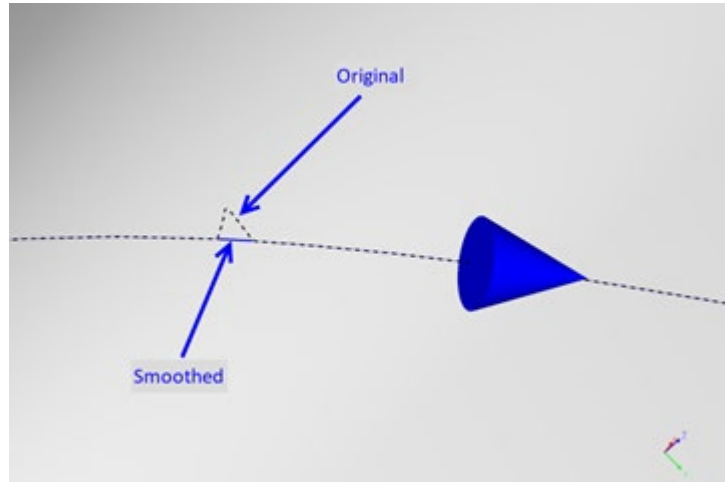


Added the ability for users to flip the direction of curves.



Release Notes

Added the ability for users to smooth curves.



Added the ability to generate Stagger Reference Curves from manually selected curve.

Reference Curves

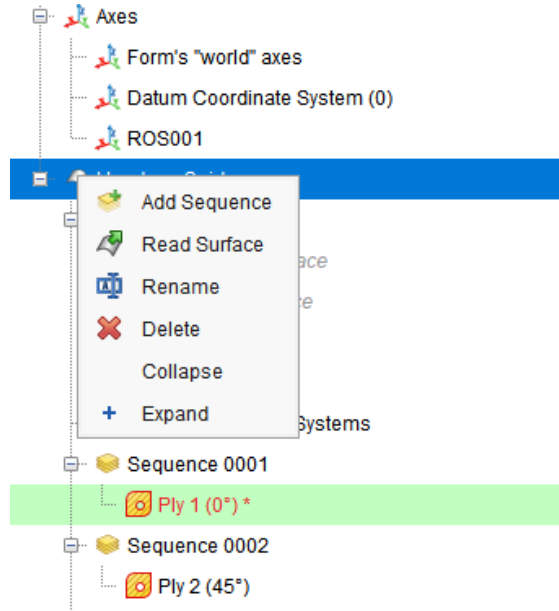
Base name 💡 💡

Datum point in in in 🔗 🔵

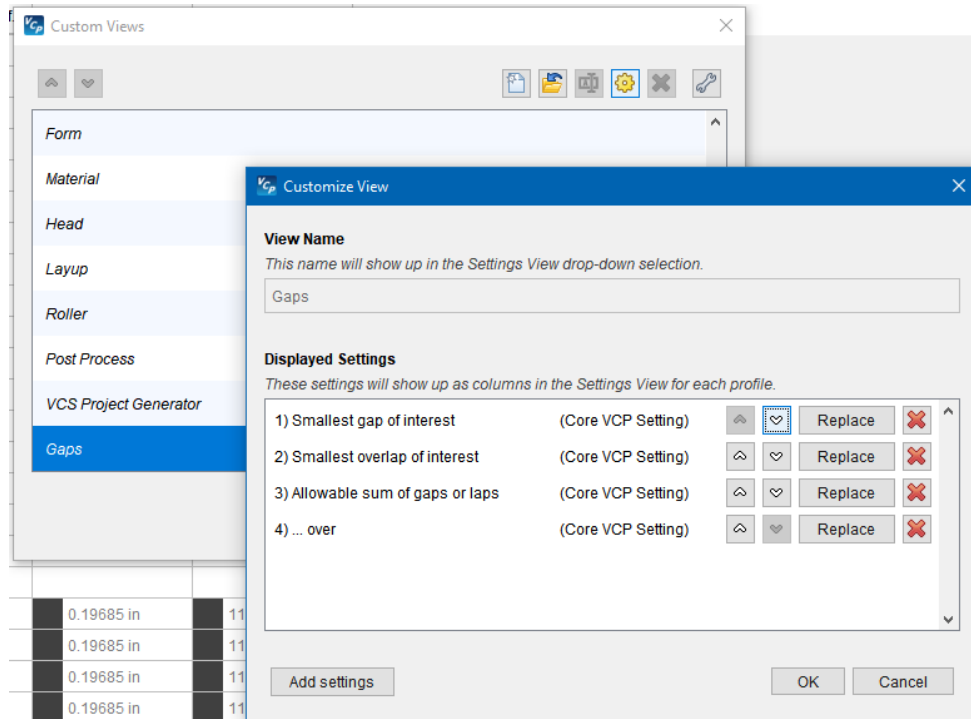
Name	Select
Locating Boundary	
N45Guide	<input type="checkbox"/>
Overcore Boundary	
P45Guide	<input type="checkbox"/>
Undercore Boundary	

Release Notes

Added the ability to Expand/Collapse all options in the VCP Laminator Manager tree.



Added the ability to set default Analysis settings in profiles.



Release Notes

Added the ability to import CATIA 3DEXPERIENCE Composite files (requires additional license).

Features:

- Read CATIA CPD 3DXML file output up to version R2022X
- Read native programming CAD surfaces
- Read native tooling CAD surfaces
- Read Laminate stacking tree structure
- Read Ply boundaries
- Read Start points
- Read Fiber direction
- Read Material density

Enhanced the import of SOLIDWORKS files.

Added a Jython API for our robot library.

Added the ability to set the Material Bulk Factor as a percentage in Material Settings.

VCP now auto-populates file extensions when saving parts, surfaces, posts, etc.

Added the ability to remove all options pins on a selected course.

The user may now drag and drop post processors onto the Laminate Manager.

VCP now automatically checks for updates upon launch if desired.

VCP now allows the user to display ATL cuts in Preview Window relative to selected CSYS.

VCP now highlights the active or selected CSYS for easy reference.

Added the ability to query batch reports with the Python API

Exposed File->Import CAD Geometry to the Python API

Exposed File->Read Template to the Python API

Roll Center offset has been enhanced for use in thinner parts.

Problems Resolved in VCP 9.4

An issue preventing Modify Pin Location from working with ATL has been fixed.

An issue causing 'object has no attribute' error while loading some post processors has been fixed.

An unexpected program exit caused when Minimum form radius < 1mm has been fixed.

An issue preventing courses from being generated in some instances has been resolved.

Release Notes

An issue causing courses to extend past surface edges causing undesired twists has been resolved.

An issue causing barrel wraps to fail has been resolved.

An issue preventing Roller Diameter from updating in the Roller Visualization card has been fixed.

An issue causing a "TypeError" error message while running VCP in headless mode has been fixed.

An issue causing incorrect A/B course coloring has been resolved.

An issue preventing the course centerline from trimming in some situations has been resolved.

An issue causing "Delete and Add" buttons from being visible when adding New Advanced Rosette has been fixed.

An issue causing an unexpected program exit while using Generate VCS Project has been fixed.

An issue causing "Delete and Add" buttons from being visible when adding New Advanced Rosette has been fixed.

An issue causing an unexpected program exit when generating courses using Splice Cut lines has been fixed.

An issue with ATL on part Scrap Cuts has been fixed.

An issue with ATL Make Full Width has been fixed.

An issue with Gap and Lap reporting in ATL has been fixed.