



# What's NEW in VERICUT 8.2

IMPORTANT! - Licensing is NOT included in software shipments. See "How to get a license" below for details.

July 13, 2018

Dear VERICUT<sup>®</sup> User:

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

The VERICUT 8.2's NC program simulation, verification, and optimization technology is packed with new features making it more powerful and easier to use. This letter describes important changes in VERICUT 8.2. Take a moment to review what's new and improved in this release.

#### **Maintenance and Licensing Information**

**How To Get a License** - All users must complete and return the License Request Submit the application at:

http://www.cgtech.com/vericut\_support/request-license/. Licensing is sent via Email only.

**NOTE:** This software requires a VERICUT 8.2 license.

VERICUT VERSION 8.2 runs on 64 bit Windows, and is supported on Windows 7 and Windows 10 computers. It is not available for 32 bit Windows computers.

VERICUT's license server will continue to run and be supported on 32 bit or 64 bit computers.

Both VERICUT and the license server can be installed by both 32 bit and 64 bit computers. When installing VERICUT with a 32 bit computer you will be warned that it can only run on 64 bit systems. The warning will not display when installing the license server.

*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 (<u>http://www.cgtech.com/about/contact-us/</u>).

Sincerely, Gene Granata CGTech VERICUT Product Manager

# V8.2 Release Highlights

# **Head-Up Display**

Head-Up Display (HUD) shows NC program or Status information over VERICUT's graphical views. HUD is configurable- users choose the information to display, text size, colors, translucency, and more.

To see a video <u>click here</u> or check the video listing on the Welcome panel of VERICUT.

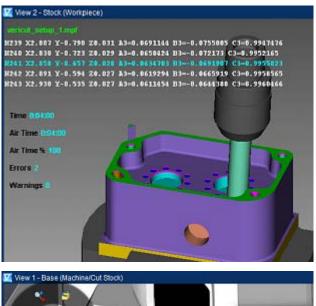
# **Radial Menu**

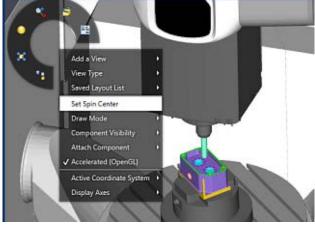
The Radial menu, accessed by right-clicking anywhere within a graphical view, puts commonly used functions just one click away. Radial menu choices are customizable via the Customize Ribbon (Gear) icon > to access the Popup Menu tab.

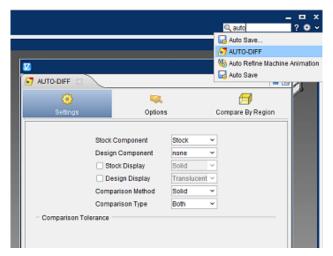
#### **Ribbon Search**

The Ribbon Search (Magnifying Glass) icon makes it easy to find favorite features in VERICUT's Ribbon interface. Just type a few characters in the search field, and a list of matching feature names is presented. Hover over a name in the list to learn where it resides, or select it to perform that action.









# **OptiPath-Force**, **Tighter Integration**

VERICUT's OptiPath and Force modules are more tightly integrated. Providing a consistent workflow, eliminate redundancies, and provide easy transition between optimization methods. New Stock Material Records describe each cutter's usage limits, and optimization strategies for the stock materials it can be used to cut.

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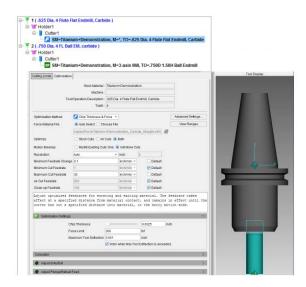
#### **Force Turning Optimization**

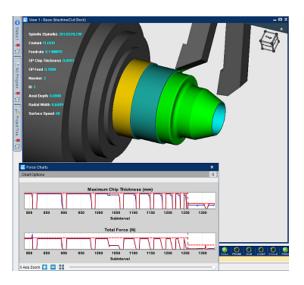
Force Turning joins "forces" with Force milling optimization. In 8.2 users can create highly optimized NC programs for turning, milling, and mill-turn machining centers. Feed per rev, feed per minute, and constant surface speed modes are supported.

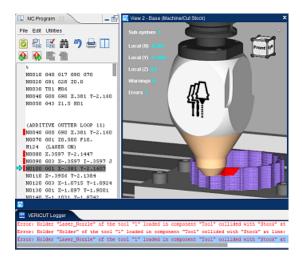
To see a video <u>click here</u> or check the video listing on the Welcome panel of VERICUT.

# NC Program "Alerts"

Alerts symbols identify blocks causing errors (**Red**) or warnings (**Orange**), so programmers can quickly spot them. Hovering over an alert symbol reveals descriptive text about the error or warning condition. NC programs containing errors are highlighted in the red Alert color.







# **Keyboard Shortcuts**

Keyboard Shortcuts speed workflow by letting users define hot-key combinations that can quickly access VERICUT functions, or perform common user actions.

To see a video <u>click here</u> or check the video listing on the Welcome panel of VERICUT.



# More Enhancements and Changes in V8.2

# Verification

- HTML Report generator produces relative pathways for images.
- Dynamic controls added for TopSolid V7.
- A streamlined View Cube with translucent background has been implemented.
- The File Selection window has been updated with Windows-like functionality to enable you to navigate to previous locations more quickly, multi-letter find feature, folder options, full path listing, and a right-click options menu.
- Model Utilities has new convex subdivide and remove features.
- Rotary feature "use as spindle" has been added, enabling users to treat rotary inserts as spindles.

# **Optimization (Force and OptiPath)**

- Prompt optimization mode enhanced to let users choose OptiPath or Force optimization methods.
- Learn optimization mode creates Stock Material records with Cutting Limits and OptiPath "Volume & Chip Thickness" optimization.
- Several new options for Command Line Options for Batch optimizing have been added.
- Force Charts right mouse button menus have been expanded.

# **Tool Manager**

- Tool library file encryption on the Save File encrypting Tool Library files prevents component details from been seen or edited.
- Support added for Sandvik CoroPlus Tool.

# **G-Code Processing**

- SiemensPolarAngle now takes into account mirroring.
- Support added for G01 using I K C and R values for creating chamfers and rods.
- OkumaSetIgnoreRoughCycleFlag was enhanced to support all turrets.

#### **Library Files**

- Enhanced CYCLE832 to latest version.
- The Heidenheim control has been enhanced to better support PLANE AXIAL TURN.
- Hei530 and Hei640 controls have been enhanced to reduce issues with CYCL DEF 10.1 ROT.
- Implemented CYCLE99 in library SIEMENS 840D controls and a new sample sin840d\_cycle99.vcproject was also added to demonstrate this cycle.
- Added RefreshToolOffset to G68 on "mazatrol\_matrix\_m.ctl".
- FUNCTION TCPM AXIS/VECTOR added to library controls hei530 and hei640.

#### VDAF

• VDAF now supports multiple setups.

# **CAM Interfaces**

**CATIA** 

• CATV6 3DEXPERIENCE has been enhanced to retrieve stock/fixture/design model attributes, model placement and orientation, to transfer models more seamlessly and automated to VERICUT.

#### Edgecam

• Support added for Edgecam 2018 R2.

#### Mastercam

• Support added for Mastercam 2019.

# **Problems Resolved in V8.2**

# Verification

- Fixed reported problem where Driven Points did not display correctly across all views.
- Axis Mapping logic has been enhanced.
- Fast feed exceeded errors are no longer falsely generated for motions in degrees per minute feed mode.
- Resolved an issue of unexpected termination when array variables are highlighted and Defined At or Last Update when selected from the right mouse button menu.
- Tool Use Graph displays tool information via moving the mouse over the color line.
- Improved space bar to allow block function in Step Into Subroutine.
- X-Caliper measurements no longer get stuck in metric.
- Importing CATPart no longer causes unexpected termination.
- Improved Model Utilities Repair function of STL files to output models faster, ensure surface normals are consistent throughout, and create higher quality models.

# **Tool Manager**

- Shank of tool no longer exceeds near miss tolerance.
- Using alternate tool holders no longer causes false instances of near miss errors generating.

# **G-Code Processing**

- False instances of "Warning: Invalid Circle Statement" have been reduced.
- **OkumaSetIgnoreRoughCycleFlag** has been enhanced to support better roughing approaches and to removed unwanted cuts.
- **ReportExpressionErrorsOnOff** is set to "Off" by default but can be turned on by changing the OV to 1.

#### Reviewer

- Simulation run time has been reduced.
- Tools in Reviewer no longer save incorrectly.

# VDAF

• Nullpointer Exception errors were fixed during Post Processor Run.

# **CAM Interfaces**

#### GibbsCAM

- Resolved a problem with importing some GibbsCAM files that caused unexpected freeze.
- Tool inserts import correctly into specified positions.
- Resolved an issue with Stock/Design profile geometry not outputting in correct locations.

#### NXV

- Resolved a problem opening VERICUT when selecting an existing Tool Library.
- Phantom Operation listed before a Machine Operation is now ignored.
- Support added for Countersink tools with 0 tip diameter.

TDM

• Large imported tool lists no longer result in mixed up cutters.

# New Macros in V8.2

**AdditiveSetMaterialFeedUnits** CancelSecondaryWorkOffset ConditionalActionCancelList CoupleCompNames CycleTurnThreadRetractMotion GageOffsetDirect OkumaSetIgnoreRoughCycleFlag PartNormalModal **ProcessCompNameFeedrate** ProcessCompNameValueSync **ProcessCompNameValueSyncWait** ReportExpressionErrorsOnOff ReportInvalidCharsErrorsOnOff SiemensAXISMappingOnOff SiemensPAROT2 SiemensRotaryRanges2 SiemensTCOFR2 **TransformXyzUvwOnOff** UnCoupleCompNames WPRelativeOnOff