



What's New in 3DCS?!

8.0.0.0

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8.0.0.0 - August 2023

Below are a list of changes, enhancements and resolved issues based on the entire 3DCS suite or a specific CAD system available with 3DCS. Please review the list of changes and don't hesitate to ask about a specific change.

Any text written with a teal highlight refers to any Simulation Output change. In other words, some calculation changes were made to either a distribution, a measurement output or DLL result. This could result in minor changes to a previous Model Simulation output.

What's New pages:

Advanced Analyzer and Optimizer

Compliant Modeler

3DCS Mechanical

Visualization Export

Batch Processor

Enhancements

Auto Linking: Added capability to the Feature Linking Wizard to automatically link features. Supported feature-types are: planar, cylindrical, conical and spherical features.

Features (dialog): This function allows the user to edit the Mesh Density, Chordal Height and Cylindrical Threshold of a single feature. Features can also be renamed from this dialog. (30251)

Auto Refine: Added an option in the Preferences (Model Settings) to apply a percentage of the Location tolerance as a refinement for Form or Orientation. (71760)

Stored Part Locations: This options, available in Copy Data and the Edit Points dialog, allows users to have 3DCS remember where parts are in design position. This will make copying points between parts that were created in different coordinate systems much more easily. There will no longer be the need for users to flip back-and-forth between an exploded and design view just to copy points between parts. (70830 & 71382)

User DLLs to Moves, Tolerances or Measures: Any Moves, Tolerances or Measures previously created as a User-DLL will automatically be converted to the new MTMs when opening a model in the new version.

- The Iteration Float Loop move and Iteration Secant move (now called Bisection) User DLLs have moved to the Iteration move.
- Autobend and Segment Bend routines can now be found under the new Auto Bend move. (71132).
- Translate and Rotate DLL routines are now included in the new Transform move. (71191)
- The Equation Measure DLL is now it's own customized GUI and can be found in the list of measure as Equation. (36484)

Monte Carlo Analysis:

- Changed the DCSDDB2 file when the software is set to Zero-Based DB2 in the Analysis Settings. The Spec Limits will report the Nominal Spec Limits if set to nominal (the setting is unchecked); and Zero-Based Spec Limits if the setting active. (72487)
- Corrected the Zero Based and Nominal Based when exporting a DB2 file, by adding the deviations to the Nominal Value (Nominal Based) or using the deviation values (Zero Based). (68884)
- Fixed the Linearity Calculation for Hole-Pin Float to calculate the Min, Max and Center. (72825)
- Changed the normality testing methodology to accept more curves as Normal. (71368 & 71381)

Contributor Analysis:

- Fixed a bug with the EWCR calculation with multiple GD&T frames on the same feature. (72413)
- Enhanced the Contributor Analysis to better find the Angle variation of a planar rectangular-type features. (71327)

- The GeoFactor value for float from the Dimensional Distance measure results are corrected. (73098)
- Fixed an issue with measuring a Profile GD&T on a Circle or Feature of Size, shows tolerance in the Contributor results. (72162)
- Fixed a bug in saving the .rss file to export the Geofactor value correctly when the Angle is set to radians or degree. (72838)
- Fixed a bug in the Analysis Summary window that would occasionally not order results by a column correctly. (71355)
- The HLM contributor from pattern move is adjusted to reflect non-normal distribution type.(71890)

General

- Fixed a bug in perpendicularity GD&T when applied back to Feature of size Datums. (72861)
- Fixed a bug where Auto Refine for Orientation was not varying as expected when the Preference setting is set to 100%. (57915)
- The float for slot/pin is now combining the nominal clearance and the size tolerances into a single contributor, just like the hole/pin float.(72543)
- Added the third features information to Excel for the pattern-Fit move.(69239)
- When float distribution is Constant, the VC measure should have Geo Factor = 0. The Position GD&T, Circular Tolerance, or HP-Float calculation in the HLM is changed from Low-Offset-High to Low-High if the Magnitude is Constant. The center values are removed. (72418, 72589)
- Enhanced the GD&T dialog by adding text to the GD&T Type drop down section. (72538)
- GD&T Icon display in the report has been improved by showing the Extracted GD&T with its unique icons.(66287)
- The Seed number is prevented from being set to zero in the Preferences and Run Analysis dialogues. A zero seed will not allow deviation. (72408)
- Save messages will get triggered for Right click delete and points drag and drop. (72291)
- Changed all Config files extensions to INI from CFG files. (72063)

- Import .wtx file will pop up the Tree link wizard to allow the user to link the parts manually if the tree structure of the model is changed. (71839)
- The bottom frame in composite GD&T will no more show grayed combo boxes for Material modifiers and diametrical zone, instead we totally hide them if not applicable (71364)
- Fixed the Edit Point dialog to keep the Global/Local Coordinate setting set for points, until the dialog is closed. (71436)
- Deleting a feature of size which have a center point linked will now convert the center point to Coordinate point without creating a size tolerance automatically.(71445)

GeoFactor

- The Equation Based 6-Sigma results match the Theoretical (RMS) results for all distributions with the one exception, for Constant and BiMode distributions, where the number is adjusted by a scaling factor of 4.5 instead of 9. (72644)
- The GeoFactor Analyzer Percentage table will now be displayed along with the factors table by default and doesn't have to be displayed when the Report is generated. (72303)
- Fixed a regression in the GeoFactor results with HP float cases.(71999)

Dialogs:

- Added a new setting 3DCS Preference → Display to control the parts highlight when a top assembly is selected to improve the performance speed on bigger models. (72932).
- Fixed an issue when Editing or Creating a Note, closing Microsoft Word or closing the External Editor dialog in 3DCS, correctly saves the note and image with the model. (72696)
- Enhanced the DRF creation dialog for GD&T. (71728)
- Added Previous and Next arrows to the Summary Window, to scan through the measures when only the Contributor lists is shown. (71702)
- Show Samples deviation list will show the current units used and set in the model. (71989)
- Creating a point from the Feature Point dialog with the edit point dialog open will no longer delete the created point when hitting OK in the Point dialog. (71703)

- Fixed a unit error that would display Diametrical Sizes in certain dialogs in MM even when inches is the setting. (68641)
- Added reordering ability to the DRFs in the **Edit DRFs** dialog. (70075)
- Enhanced the selection dialog to have filters for feature type. (71230)
- Relationships tree will follow the Empty Parts Model Navigator setting. (72779)
- Enhanced the Feature Move dialog to expand all the fields evenly. (72143)
- Fixed an issue when Spec Studies are moved to a Spec Study Group, hiding the information about each Spec Study in the dialog. (72305)
- Fixed the Vector direction for zero to not to show a negative zero when switched direction. (70532)
- In the Report Generation dialog, **[OK]** has been changed to **[Close]** to better reflect what the button will do. (70853)
- Copy Data will now show the correct unit size for Features of Size. (71710)
- When selecting empty parts in the Model Navigator, 3DCS will highlight the part in the graphics. (71464)
- When using "Type to Search" in MTM dialogs (example: the Point Distance dialog), 3DCS's search function will now automatically replace any spaces with underscores when performing the search. (71356)
- Hid the Switch Direction button in the Pick Vector dialog, when the direction type is not set to Type-In. (72548)
- The Move Multiple Parts checkbox in the Best-Fit Move will now be defaulted to unchecked. (71361)
- Fixed a bug that prevented individual measures from being opened correctly when viewing only 1 Group of Measures in the Analysis Summary Window. (71363)
- Changed the Move Multiple Parts check-box to be Move Parts Independently in the Best-Fit Move dialog. This is a more clear representation of what the check-box does. (71597)
- Model Variant Dialog now allows MTM List and Group selection. (68658)
- Points Window select can now be done from the Grid style dialogs. (71686)
- Fixed an issue in the Part Info dialog, made all the buttons to work correctly.(71848)

- Switching the Direction Index in the Tolerance dialog will switch the display of the Vectors in the Graphics also.(71766)
- Fixed a crash on closing the Best Fit Move dialog.(71908)
- Removed the Show Name and Range option, from the Analysis Options → Contributor tab. This function shown the Tolerance Name and Range on the tolerated feature, using the Legacy Labels. The function was removed a while ago, but the option remained. (73122)
- Shift select features from Lock DOF dialog will no more freeze the software.(71773)
- The Part selection will highlight the parts correctly in the Graphics when selected from the Collision detection dialog. (70776)

Tolerances

- The Size Tolerance dialog has been updated and is now available as a separate Tolerance. The Circle Size Tolerance will not be created automatically, unless the setting is activated in the MTM Defaults page, in the Preference dialog. (71803)
- Fixed an issue with Exporting to Excel and setting the Circle Size tolerance to use 0/0.2 or 0/-0.2. Importing from Excel would change the range to an un-useable value. (73053)
- Offset option is hidden from the Circular Tolerance dialog unless the distribution is set to Constant.(71145)

GD&T:

- Composite Position GD&T, the pattern direction is changed as using the first valid feature direction. (73018)
- For the new Multi-DRF feature we've added in 8.0, any time it is impossible for 3DCS to find a location where the two zones overlap (they might not overlay) then 3DCS will mark that as a No Build. The same rule will apply for failed sampling in Range Control mode. (72435)
- Added the ability to create two GD&T call-outs on the same Feature(s) with different DRFs. For example, a Position of 2 to A|B|C and a Position of 1 to D|E|F applied to the same Feature. (55890 & 66235)

- Perpendicularity GD&T with Grouped Feature active, will correctly deviate the features from the Hole/Pin center point. Previously, the tolerance would locate an average center on all features, but would not be located on the actual center. (71943)
- Fixed a bug in Composite GD&T that would return the incorrect results for the EWCR and BiModal DLL. (54232)
- Fixed grouped Perpendicularity on axis to report the correct Contributor results. (72115)
- Added support with Dimensioning Location and Angular geometric tolerances. This will work similar to adding an angular refinement to a location geometric tolerance. (70321)
- The Feature Cloning checkbox in the Options tab of any diametrical Composite Position GD&T now correctly works to have a translation and rotation component for the PLTZF of the Composite GD&T. (70383 & 70345)
- The large deviation caused by the datum shift on the tertiary datum has been eliminated. (72253)
- The GD&T size tolerance on a slot (with no position tolerance), is corrected in the Monte Carlo analysis, for the Range Control setting. (72443)
- The GD&T call-outs for Profile and Position applied on a non-planar zone calculation are corrected to produce non-zero Est.Range values in the Monte Carlo analysis. (71940)
- Spherical features are supported in composite position GD&T. (71913)
- The Dimensioning Location GD&T will respect the Coordinate system of the part/assembly it's contained in. (73041)
- Added support for Circular Runout with points using Circle Size tolerances. (71438)
- Added the ability in the new Edit DRFs dialog to add (M) or (L) to Datums in a DRF that are formed by two parallel planes (slots or tabs that are not slot or tab features). (71930)
- Fixed a bug that would double the impact of an orientation GD&T when calculating Worst Case values for certain setups. (71936)
- Fixed a bug that would include orientation on a curved surface in the contributors and GeoFactor Equation-Based results. (71939)

- Fixed a bug in the Min Max Truncation setting to properly apply it on the GD&T range. (72217)
- Datum D pattern is only going to control the rotation of the part when using A-B-D. (71747)
- Dimensioning Location GD&T now supports length deviation with coaxial points with diameters. (71619)
- Removed an incorrect error stating that a uni-directional composite Position GD&T on a set of cylindrical points and features is not supported. (69679)
- 3DCS will correctly support Runout on points with Circle Size tolerances. (71438)
- Enhanced the Angle Size GD&T dialog to include a direction when applicable and only allow two features to be selected (similar to Dimensioning Location). (70631)
- Removed an error for Angle Size GD&T that says two features are required. With recent enhancements, if a tapered surface such as a cone is selected, then two features are not required for variation to occur. (70941)
- Fixed an issue with Dimension Location using Edges, causing the parts to incorrectly translate in the edge direction. (71451)
- Fixed the bug where the Slot Composite position GD&T was not working. (72239)
- Fixed an issue with Dimension Location using Edges, causing the parts to incorrectly translate in the edge direction. (71451)
- Fixed a bug that would read in distributions incorrectly when we opening models from before 7.9.0.0. (71332)
- Fixed a bug with Visualize Effect and the Angle Size GD&T displaying incorrectly. (71393)
- Removed Spherical Zone shape from call-outs that technically cannot have a Spherical Zone shape: Straightness, Perpendicularity, Parallelism, and Angularity. (71398)
- Fixed a bug in the analysis with how Contributor Analysis/GF Equation-Based was treating Straightness on a pin surface. (71415)
- Fixed a bug with Visualize Effect and Circularity/Cylindricity. (71416)

- Removed an error that incorrectly stated that two linear Position GD&T on a hole or sphere would not deviate correctly. (71462)
- Fixed a graphical bug that would display stored hidden points in the Point Distance, Line Angle, and Plane Angle measures. (71548)
- Fixed a bug that prevented GD&T from being created within a GD&T Group. (71563)
- An error will be given upon creation if the Form Zone > Orientation Zone > Location Zone. (71564)
- Fixed a bug that prevented form on a single Coordinate Point from appearing in the contributors list for a Size measure. (71599)
- Straightness GD&T's default zone shape has been changed to Diametrical Zone. (71601)
- Fixed a difference in interpretation that treated Straightness of a surface on an axial feature differently between RSS and RC analysis methods. RSS is the correct methodology as it does not effect the location of the central axis of the feature. Both RC and RSS will now behave as RSS.
- Fixed a bug, DRFs from the GD&T dialog will now be displayed correctly. (71767)
- The Feature Clocking setting is now available for ISO dual Position Tolerance when Group Features is active. (72600)
- Create a 'SetFeatureAverage' GD&T callout for surfaces that need to correct the direction in which they deviate due to the incorrect direction of the surface vector. (72919)

Features

- The point belonging to a Point-based Feature surface will no longer lose its vector values. (72793)
- Slots created using Dynamic points will now update instantly, if the dynamic mid points position is changed. (72203)
- Deleting the CadSurfaces using the Delete Unused Information button will now remove the surfaces correctly and will no more bring it back on save. (72087)
- Changed the Feature Locator Point and center of rotation for features to use Min-Max center rather than the average of mesh nodes. Gives much more consistent results that are no longer dependent on dense areas of mesh for a surface (due to a

high number of hole or pin features on a face or just a high density of Feature Points on a face). (69990)

- Improved the Deactive icon display for the entities in the Model Navigator Tree. (72013)
- Made the Tolerance window filter (All, Tole Only, Circle Size Only) be remembered each time the window is opened. (71868)
- Added settings in the software to handle the new Point copying method, allowing more versatile point copying when points are in their separated locations. (71950)
- Creating a Slot or Tab will also generate a name specified by the feature type. (71389)
- Fixed the inconsistency on how Hide/Show points and mesh works selecting from Ribbon and from the right click menu.(72045)
- Fixed the Text for "Rand1" in GD&T dialog to display as "Rand #1" to make it consistent with other dialogs.(72082)
- Fixed a bug in the Dimension Distance Measure to able to pick an existing point to Measure.(70471)
- Fixed a bug, Points drag and drop will now respect the Preference setting "Point copying method".(72046)
- Fixed an issue, dcs_raw_tol_data file will now report the Position GD&T difference correctly.(71944)

Model Navigator

- Added Font size settings in the Display Options. (72747)
- The Parts will no more shift or reorder when it gets empty with Empty Part filter checked. (71787)
- Fixed a bug in Model Navigator drag and drop function. (72862)
- The keyboard commands, Ctrl+C, Ctrl+V, and Ctrl+X, will now work with the Model Navigator. (72860)
- Fixed a crash when cut and pasting an MTM or GD&T Group to another product level. (72095)
- Fixed the Tree expand collapse not retaining the position issue. (71796)

- The Tree Link Wizard will now pop up for the user to manually link the parts if the Part names in the imported .wtx file does not match with the Part Names in the DCS Tree. (62241)
- Fixed a Branch Tree issue with empty parts checked to no longer add new parts to the tree. (71709).
- Renaming Part information will now be saved in the model, even if it does not have any 3DCS data.(71200).

Moves

- Best-Fit move changes: Now includes the Projected on Plane and True Distance options (previously known as BestFit2D and BestFit3D DLLs). (71160)
 - Projected on Plane move is corrected to set the surface features as points when it does the least square plane fit routine so the part does not shift anymore. (72240)
 - Projected on Plane option is now building correctly when all pairs are in a line instead of a plane.(72749)
 - When inserting a row, a new direction will be inserted at the same index. Also the Delete Feature button is removed. (72120)
 - The default weight value is set to 1 and if the weight is set to 0 then that pair is ignored. (70779)
 - The Best-Fit move floating calculation is corrected to skip inactive floats. (72605).
- Fixed a crash on closing the Pattern Rigid move dialog. (72826)
- Fixed a bug in the Feature Move that struggled with the anti-rotate feature when there is an Axial feature as the primary Object/Target pair. (72818)
- Enhanced the Feature Move to automatically set the Primary Orientation Control based on the orientation of the parts prior to the execution of the Move. (71516)
- The first feature in the list is now the starting location for part's expansion with Thermal Scaling, even if the features are reordered. (71844)
- Corrected how the Pattern Move Open Increment unit in the run log display, to match with the CAD Unit. (30375)

- The Run Log will display the correct Open Increment diameter number when the Pattern Move cannot fit the diameter size. (71560)
- Changed how Conditional Logic reports data, when active but no Contributor results will be shown from the Pattern move and if the Conditional Logic doesn't pass. (70248)
- Failed samples will no longer occur with the Fixed-Fastener Pattern Rigid move. (71004)
- Fixed a bug in Thermal Scaling Move where the Coefficient number is not editable for individual Parts. (72052)
- Fixed an issue when using Pins as the target and Slots as the objects, reporting interference with the pins, using the Pattern Move. (71739)
- We now report failed assemblies when pattern move is under an iteration loop. (71492)
- Enhanced the Bend options to support Point-Based features (Edges) and with GD&T applied to correctly deviate the edge and the part. (71701)
- There is no longer a Run Log error regarding directions of the Pattern Rigid Move. It is now only a Validation Warning. (71593)
- Clicking the Move Parts from the Move dialog will highlight the parts in the Graphics. (70196)
- Updated the error message for the iteration move to make it more clear.(71790)
- The Cross Product is removed from the dcu_calcdire.dll and given it's own GUI under the Analyst Moves list.(71259)
- The Pattern rigid move with float mode 2Edge, 1Edge, Min- Max will not show up as a contributor for Circle Interference Measure.(72606)
- Fixed the Visualize Effect to deviate correctly for Pattern rigid Move. (72606)
- Fixed an issue when reading from Excel and to correctly update the missing information for a Pattern Fit move. (71605)

Measures

- Added Contributor Analysis support to Line-Angle measures with slot/tab used in a Pattern move. (71751)

- Dimension Distance measurement calculation for Min. Distance is corrected for the case where one feature is located completely inside the other feature. (72944)
- Fixed a bug that had the Surface Profile Measure choosing the wrong point to report the results from. (72353)
- Moved Measure Generator under the Measures sub-menu. (71201)
- The GD&T Measures will not be able to add or show Datum Shift in the DRF. Previous created measures with Datum Shift will need to be edited to fix the validation message. These are not supported in 3DCS so allowing the selection of these in the past was misleading. (71567 & 71575)
- Measure Generator position is now changed under the Measures List. (55509)
- The MTM Info dialog for Measure will now display LSL and USL instead of LDL and UDL. Also if a measure has no limits it will be displayed as N/A. (71769)

Display

- Color Contour shows positive and negative displacements, with the most negative values colored blue and the most positive colored red. (62800)
- Fixed a refresh issue with Color Contour Lines, which will show up right after running Simulation for the Analysis Summary page. (71851)

Validation

- Added a Warning in Validate for Dimensional Distance Measure: Non-radial direction is selected for two parallel cylinder features, please consider using the default direction. (73121)
- A warning message is added when a Size Tolerance (GD&T) is applied without using the diameter symbol in the GD&T dialog. This message would also appear after NB: Warning: PT-Circle-Size is disabled (72125)
- Added validation warning to catch if Spheres are used for Circularity. (71628)
- Removed error checking for a GD&T Position (Diametrical Zone) on a Coordinate Point. It deviates as expected and will no longer give an error saying it is not supported. (69635)
- Added a validation notes when a Feature of Size are toleranced with more than one type of Size Tolerance. (54176)

- Updated the Summary window (available in all MTM, GD&T and Information dialogs) did not correctly display the current units. (70451)
- Fixed an issue where the Update model was generating wrong validation errors. (72622)
- The "Multi-Form GD&Ts" error has been refined to only display the error if both Form tolerances are applied to the Surface or Axis. It is now possible (without an error) to have a Form tolerance on a Surface and a separate one on the Axis for the Feature of Size. (66739)
- A Validation Error has been added for when an Orientation GD&T is applied to a single Point which does not have a Size associated to it. (71598)
- Corrected an invalid direction validation message from the Point-Line measure. (71828)
- Creating one page reports from Save All Simulation results to JPEG, will correctly size the Histogram and Statistics within the image window. (72114)
- Fixed a crash when creating a report with Google Workspace, with Chinese regional settings. (71343)
- Added a validation warning when the distribution for Composite Position GD&T is changed to be Non Right Skew or Non Normal. (72223)

Report:

- Creating a Excel Report and deactivating the Contributor Graph, the report will correctly show the Percent Contribution and value. (72723)

User-DLL:

- Fixed an issue with the RAW Tol data DLL, which was missing some previous changes. (73120)
- Enhanced the dcsMvTakeMeasValues dll to collect data for builds only within the spec. (70304)
- The Analysis results are now displayed correctly for measured point moved with dcsMvPtToLsqPlane DLL. (73086)
- Fixed the "dcsProjPtOnFeat" dll to correctly projected the point on the given direction for irregular surfaces. (72439)

- The Min gap at all locating pairs is now zero (no interferences) in the High Point User DLL move. (71596)
- The DOE function outputs HLM files as well. (70789)
- Fixed writing a RSS file from DOE in Comma Delimiter. (72047)
- User DLL Measure GUI is rearranged and improved for ease of use.(71193)
- User DLL Tolerance GUI is rearranged and improved for ease of use.(71192)
- User DLL Move GUI is rearranged and improved for ease of use.(71194)

License

- Enhanced the software to automatically separate the model if the software loses its License allowing the user to save the model. (72006)
- Added a License timer check where the Software locks up on losing the license. (72396)

Issues Resolved for 3DCS - Creo:

3DCS is now integrated in Creo version 9.0 and 10.0. (72504)

Added a new display function for 3DCS called Animation Accelerator. This feature will allow users to build and deviate 3DCS models. This is a light version of the CAD, to help improve performance with large, complex models. The Animation Accelerator also adds the Color Contour functions. (71734)

Added Import Subassembly and Export Subassembly functions, which will transfer 3DCS data back and forth between sub-assemblies structures. (72308)

General:

- Fixed a bug where the Model Navigator was closing unexpectedly.(72714).
- Added a minimum width value for Report images in the Report Generation Dialog to prevent it from Crashing. (72752)
- Fixed a crash on closing the second opened model. (72409)
- Selecting Features from the model will highlight it in the 3DCS Model Navigator. (Applies only to Creo 4). (68917)
- Fixed the issue with TranslatebyvalueinInches, where the inch unit was not applied correctly. (70671)
- Fixed a graphical bug that would shift all of the geometry in Creo when Nominal Build was selected. (71226)
- Fixed a bug that made it difficult to select Features within Creo when Mesh Display was turned on for particularly small models that had slots/tabs present. (71294).
- Changed the method used for Branch Tree to eliminate the "Feature Ghosting" that was seen in Creo. Now the non-shown parts will be completely hidden so that their features will not accidentally get in the way. (71295)
- Fixed a bug where Creo points created on Nominal build was getting saved with the model. (71823)
- Visualization Export will now create the .fbx and .wrl tessellation correctly. (71542)
- Fixed an issue with saving the model where Part's Parents was not getting saved correctly.(71845)

Dialogs

- Fixed an issue when a Slot/Tab were incomplete, preventing the user from selecting features from other dialogs. (72689)
- Fixed a bug in Creo integrated packages that prevented the auto-conversion of units in dialogs when mm was entered but the assembly level was in inches. The conversion now works correctly. (70770)
- Fixed the drop-downs for convergence in the Run Analysis dialogs. They are no longer small and they will now appear as a normal drop-down. (71350)

GD&T

- Fixed a bug on GD&T extraction on Sub Assemblies recreating Features. (72274)
- Made a fix where the GD&T is extracted from the inherited reference part it will now extract GD&T from the current part as well. (71653)
- Added an option in the Extract GD&T dialog to extract the GD&T only from the active part view. (71645).
- Added separate filter settings in the Extract GD&T dialog to extract Driving Dimensions with tolerance and without tolerance. (71489)

Features

- The UV direction display on a feature when it's selected from the Feature point dialog will no longer disappear on creating points. (70314)

Issues Resolved for 3DCS - NX:

Added a new display function for 3DCS called Animation Window. This feature will allow users to build and deviate 3DCS models. This is a light version of the CAD, to help improve performance with large, complex models. The Animation Accelerator also adds the Color Contour functions. (71734)

Added Import Subassembly and Export Subassembly functions, which will transfer 3DCS data back and forth between sub-assemblies structures. (72308)

General

- Added Set Part Position function to NX. (62036)
- Removed the option to export using Google Suite when creating a Report or Export to Spreadsheet options. Users will be able to use Microsoft tools or HTML to make a 3DCS Report or Export notes to Word, etc. (72209)

- Users will now be able to adjust the Cylinder on an edge using the Cylindrical Threshold options. (72008).
- Color Contour Lines is now added to the Software.(72491)

Update Model

- Fixed an issue when using Import WTX and using either Replace: Add, Update, and Delete, or Merge: Add and Update. The issue was some features, points and MTMs may have changed to a different feature types incorrectly. (72864)
- Revised the constraint extraction logic for Override position Parts. (72502)
- Constraints on Multi-Instance Parts will now be extracted correctly on any levels. (72398)

Model Navigator

- Fixed an issue when using Quick Copy on a Measure in a Group, which would cause the new copied measure to moved out of the Group and into another Measure list. (72857)
- When deleting an empty Group, Update Model will not cause it to come back. (72791)

Dialogs

- Added "Replace GD&T" option to NX extract GD&T function. (71829)
- Fixed a bug in NX integrated packages that prevented the auto-conversion of units in dialogs when mm was entered but the assembly level was in inches. The conversion now works correctly. (70770)
- Fixed the drop-downs for convergence in the Run Analysis dialogs. They are no longer small and they will now appear as a normal drop-down. (71350)
- Fixed a crash with feature selection from all 3DCS feature selection dialogs. (71272).
- Updated all the selection dialog. (70984)
- Fixed an issue with Convert CAD point dialog not closing properly. (71235)
- Updated all the MTM selection in NX to have filters. (71229)
- Fixed a bug where the mesh display was getting hidden on opening dialogs.(71740)

GD&T

- Fixed a regression in Datum Target Point Extraction. (71830)

- Clicking the extracted GD&T from the 3DCS Tree will highlight the NX GD&T in the Graphics. (69111)

Issues Resolved for 3DCS - SOLIDWORKS:

Added a new display function for 3DCS called Animation Window. This feature will allow users to build and deviate 3DCS models. This is a light version of the CAD, to help improve performance with large, complex models. The Animation Accelerator also adds the Color Contour functions. (71734)

Added Import Subassembly and Export Subassembly functions, which will transfer 3DCS data back and forth between sub-assemblies structures. (72308)

3DCS is now integrated in the SW version 2023.(72338)

General:

- Added protection for the Model Navigator and 3DCS Dialogs from going behind the main Solidworks window. (71476)
- Part or feature selection from the Graphic window from any 3DCS Dialog will no longer trigger the exploded view. (68347)
- Fixed a bug that prevented users from renaming points in Solidworks simply by right-clicking on the label of the point. (71380)
- Set Part Position function is now added to SW. (69128)
- Added Replace option to the extract GD&T dialog for SW which controls the re-extraction of GD&T. (71447)
- Improved some selection process in Solidworks with most of the dialogs. (71764)
- Color Contour Lines is now added to the Software.(72491)

3DCS Preferences

- Fixed an issue where the units did not reset. (72198)
- Cylindrical Threshold setting is now added to the Preference dialog to change the feature type from surface to cylinder and vice versa. (65472)

GD&T

- The Location Dimension will now get correctly extracted as Dimensioning Location in 3DCS by assigning the origin by default to the first selected feature (71603)

Issues Resolved for 3DCS: CATIA V5:

3DCS is now integrated in CATIA V5-6R2023 (R33). (72357)

General:

- Fixed a crash when selecting a surface on a CGR file in a sub-assembly. (73063)
- Fixed a bug when a Cadsurf was deleted, the Cadsurf will now remain deleted when performing Update model and Saving, close and re-open. (73040)
- Fixed an issue when using Duplicate to copy points from one part to another, which caused to corrupt the storage. Opening the sub-assemblies in a new sessions would show the corrupted data. (72747)
- Fixed an issue when copying or moving Points and MTMs from one part to another, while the parts are empty, after saving, closing and re-opening the model. The storage was not writing the data to the empty parts, so the Points and MTMs would move back to its original location. (72324)
- When opening a model and the model is saved in higher versions, the model can now be opened in the lower version by holding Ctrl key and clicking the OK button in the Update Model warning message. (71238).
- Fixed Multiple Instance with empty parts, which caused the Multiple Instances assemblies with data to show in the Multiple Instance in empty parts. (72079)
- Fixed an issue when changing the Point size type, hole or pin, will now be saved without needing to do Update Model. (71719)

Extract GD&T

- The point on a cone extracted from FT&A will now come in at the designed location. (72372)
- Fixed a bug where material modifiers on DRFs were not extracting correctly. (72517)

Dialog:

- Removed the Change Name function from the software. Users can utilize the Find/Replace function for most of the Change Name capabilities. (71969)
- Removed the Option to select Labels, when Legacy labels were active and while in Visualization Mode: from Display → Rep Selection area. (73101)
- Added the Export CGRs in the Spec Study dialog. (72640)

Display

- Labels will now update whenever a Point is renamed, no matter what method of renaming the point is used. (71379)
- Fixed a display issue, with the From and To labels of a Point-Point measure. If the points were created at the same coordinates (on top of each other), the From and To labels will now be displayed correctly. (71715)
- Addressed some issues with Color Contour Lines.
 - Activating Color Contour and Color Contour Lines will instantly show the Color Contour Lines on the CAD data.
 - Fixed the dialog to instantly work when different options are Set.
 - The Legend Position slider will correctly locate along the same directions as the slider. (72195)

Model Navigator

- Fixed an issue when copying Coordinate Points with Circle Size Tolerances to other parts and then deleting the points. Deleting the points will correctly clear out the point or tolerance storage from the model. (72813)
- Fixed an issue with the Model Navigator when using the Filters and Hide/Show Parts (Mesh and Points), causing the Model Navigator to crash or close the software. (72530).
- Fixed an issue when Moving Coordinate Points with Circle Size Tolerances in the 3DCS Model Navigator. The linked Circle Tolerance will move with the corresponding Point. (70540)

Issues Resolved for 3DCS for 3DEXPERIENCE:

Added Import Subassembly and Export Subassembly functions, which will transfer 3DCS data back and forth between sub-assemblies structures. (72308)

General:

- Fixed an issue when importing a WTX to a model with Publications made from CATIA V5 and importing into 3DEXPERIENCE. For some versions of 3DCS, importing a WTX didn't link the features to the CAD with Publications. (72133)
- Fixed a crash with 3DCS in 2023x. Users will need to download and reinstall 7.10.0.0 to address the crash. (72043)

- Labels will now update whenever a Point is renamed, no matter what method of renaming the point is used. (71379)
- Fixed an issue when changing the Point size type, hole or pin, will now be saved without needing to do Update Model. (71719)

Extract GD&T

- The point on a cone extracted from FT&A will now come in at the designed location. (72372)
- Fixed a bug where material modifiers on DRFs were not extracting correctly. (72517)

Dialog

- Removed the Change Name feature from the software. Users can utilize the Find/Replace function for most of the Change Name capabilities. (71969).
- Removed the Option to select Labels, when Legacy labels were active and while in Visualization Mode: from Display → Rep Selection area. (73101)
- Fixed a display issue, with the From and To labels of a Point-Point measure. If the points were created at the same coordinates (on top of each other), the From and To labels will now be displayed correctly. (71715)
- Fixed an issue with the option to put parts into Design Mode in the selection dialog. The Option will need to be toggled On to change parts to Design Mode or Edit Mode, and then toggled Off to select features. (72854)

Display

- Labels will now update whenever a Point is renamed, no matter what method of renaming the point is used. (71379)
- Addressed some issues with Color Contour Lines.
 - Activating Color Contour and Color Contour Lines will instantly show the Color Contour Lines on the CAD data.
 - Fixed the dialog to instantly work when different options are Set.
 - The Legend Position slider will correctly locate along the same directions as the slider. (72195)

Model Navigator

- Fixed an issue when copying Coordinate Points with Circle Size Tolerances to other parts and then deleting the points. Deleting the points will correctly clear out the point or tolerance storage from the model. (72813)
- Fixed an issue when Moving Coordinate Points with Circle Size Tolerances in the 3DCS Model Navigator. The linked Circle Tolerance will move with the corresponding Point. (70540)

Issues Resolved - Multi-CAD:

General

- Fixed an issue when importing an HSF file to instantly show the parts in the Model Navigator. (72726)
- New Welcome menu has been added to the when first launching the software. (72539)
- Fixed a crash when using Delete function in 3DCS Converter. (71667)
- Updated the Transmagic version to 14.00.00. (73064)
- Removed the Change Name feature from the software. Users can utilize the Find/Replace function for most of the Change Name capabilities. (71969)

Display

- GD&T Annotation will be hidden on Deviation and Visualize Effect to improve the performance speed. (70721)

Preferences

- Removed the Window Interface option from Preferences. (71537)