



Build!IT[®] 3.2.0 SP1 Releases Notes

Installation Notes

Upgrading from Previous Build!IT[®] Installations

The Build!IT[™] 3.2.0 installation does not overwrite previous installations. You may continue to use your previous Build!IT[™] versions.

Contact BuildIT if you have any questions regarding versions and licensing.

Build!IT 3.2.0 System Requirements

	Minimum	Recommended
Processor	1.5 GHz, 32-bit processor	Quad-core, 64-bit processor
Operating system	Windows XP SP3 / Vista / 7, 32 or 64 bit	
Memory (RAM)	Minimum of 512MB	2GB / 8GB for 32 / 64 bits
Disk space	1GB free for program files	160GB or more
Graphics card *	256MB OpenGL	Contact BuildIT
Monitor resolution	1024 x 768 pixels	1920 x 1200 dual screen
Mouse	2 buttons	3 buttons with scroll wheel

* Fonts should be set to normal size (96 dpi).

Hardware acceleration for the video driver should be turned ON.

Windows XP 64-bit

When you install the software on such a system, you are required to reboot the computer.

Windows[®] Vista / Windows 7

In order to install all the associated drivers properly, right-click on Build!IT[™] setup file and select "Run as administrator".



3.2.0 Service Pack 1

Enhancements

MDUE-8772B6BD5 Added a warning in Evaluate: Analysis: GD&T if any of the tolerances failed or could not be evaluated.

Problem Fixes

- BPOV-85CE492ED Fixed an issue with FARO arms where the time trigger functionality was not available in the record cloud command.
- SROE-87D31708B Fixed an issue in File: Import: Models: Parasolid/NX where the import would fail to complete on some Windows XP installations.
- MISE-89FEB6A33 Reinstated the "Legacy PDF" template (as "Legacy - Meas/Dev/OT") in the Evaluate: Reports: Surface/Curve Deviation command.
- MISE-8B5954660 Fixed an issue in File: Import: Models: BuildIT IMW where some IMW files from old version of BuildIT or Imageware) were not imported in the correct units.
- RLAE-40C12A0C7 Fixed an issue in Device: Inspect Geometry where the command would not find the correct nearest entity if running in the NoShow mode.
- MDUE-857C74220 Fixed an issue in Construct: CS: Coordinates/Vectors where the command could not be applied when using a point to determine the clocking orientation.
- MDUE-857D034DC Fixed an issue in all Brokers where some sounds would not play if BuildIT was started from the shortcut created during the installation.
- MDUE-87720D69B Fixed an issue in the Object Manager where selecting all the measurements using the contextual (right-click) menu from a group would select all measurements, including those not in the group.
- MISE-87C43ADA4 Fixed an issue in Evaluate: Reports: Geometry Inspection where incorrect coordinates were reported for measured points.
- MDUE-8C356ABC6 Fixed an issue in File: Export: GD&T: MEA where the command would fail if only a subset of the features were selected.
- MDUE-8C359FFBD Fixed an issue in the Settings where the "Maximum number of automatic annotations" was not persistent across sessions of BuildIT.

3.2.0

Enhancements

- ABLS-7A877E2AF Improved the handling of the ESC key in the software to do, in order of priority:1. Close any open pop-up window (Device Manager or Help > Licensed modules).2. Exit the rotation or translation mode (Menu: View: Rotate or Translate).3. Close any open command, unless the Inspect or Measure Control window is open.
- CRAE-A9C1898F3 Modified the annotation editor in order to allow the editing of multiple annotations of the same type at the



same time.

- CRAE-F86789842 Revised the display setting for GD&T features and tolerances to have them more in-line with other entity types.
- RLAE-25FB1FE4A Added persistence to the output options in all reporting commands.
- RLAE-25FB48BBF Added the probe offset for measured points in Evaluate: Reports: Geometry Information.
- RLAE-6431BF4D0 Added persistence for the selection filters in the Evaluate Distance/Angle commands.
- RLAE-6431DFC46 When picking surfaces, the back face color of the surface will be changed from dark grey to dark orange, similar to the front face color to indicate the selection.
- JCHN-9AE1325DE Improved feedback on target location when recording a process with Inspect Geometry.
- BIRT-000003591 Improved the entity selection in when imported only a subset of a CAD file. Added sorting by name and type as well as having a resizable window.
- BIRT-000003891 Added the ability to group annotations in order to simplify the setting of the visibility settings for a large number of annotations.
- MDUE-EB9D9AEC2 Added a real datum-based (3-2-1) alignment command using any quadric geometry. We are no longer limited to 3 points, 3 planes or using successive alignments with constraints.
- MDUE-EB9DE91D6 Greatly improved the point cloud preprocessing functionality by adding Edit: Point Cloud: Reduce which provides multiple methods to simplify a point cloud while maintaining accuracy in the resulting analysis.
- BIRT-000004184 Cleaned-up and standardized the message bar information displayed after running the various Device: Inspect Point commands.
- MDUE-075BD0776 Added the ability to define default values for process variables (Automate!IT).
- JCHN-094926F94 Added a new mechanism to automatically determine the optimal color patch size in surface deviation analyses.
- ABLS-1B44A6611 Simplified curve deviation analyses by removing the trend line joining the needles in the analyses as they generally make the plot more difficult to understand, especially when the point order is not consistent.
- MLIT-1F80F6392 Cleaned-up the point size and line width controls throughout the software.
- MDUE-1F83A6485 Cleaned-up the (former) Layout menu. Group/Ungroup are now under Edit, Measurement associations and Measurement data are under Device and Annotations are under Evaluate. The menu has been renamed Tolerance.
- MDUE-206ADB322 Moved the point creation options (when inspecting points) and the "keep raw measurements" to the settings and extended its use to the Inspect Geometry command as well.
- MDUE-206B93F27 Added a setting to specify the path used to find processes to list in the Automate menu instead of using a hard-coded value.
- JCHN-2084DF0BD Restored the ability to import IMW files (from BuildIT 2.3).
- JCHN-221365D16 Added the scale value and the method used to determine it to the device summary used in all reports.



- JCHN-2446BCDDF Improved Edit: Point Cloud: Delete Points in order to keep the annotations for points within a cloud that are kept.
- MDUE-2AB0B5D1B Added a Device: Home button in the custom toolbar
- MHOG-346DBB7BF Greatly improved the performance of the Evaluate: Analysis: Surface To Points command.
- MDUE-37F77462B Greatly improved the display of annotations. See the "Annotations" section in the settings to control the display and review the default colors.
- MDUE-388894F56 Added the ability to import GD&T definitions from Catia V5 models.
- SROE-38EEBF42E Added an option to automatically create annotations for out-of-tolerance points during curve analyses.
- MDUE-3ACE3599D Added automation support to the Device: Inspect Targets command.
- MDUE-3B82B84A3 Removed the following commands because their functionality was available elsewhere in BuildIT or not used: Construct: Point: Vector-Vector Point Grid, Construct: Plane: Coordinate-Vector, Evaluate: Report: Surface-Curve Report, Construct: Cloud Section: Interactive, Construct: Cloud Section: Z-grid cloud and File: Import/Export GD&T: AIMS.
- MDUE-4000CCB25 Cleaned-up the reporting templates to use a consistent style. The Point Coordinates and Point Inspection reports have been merged into the Geometry Information and Geometry Inspection reports respectively.
- QFUU-41E980C21 Improved the performance of Device: Record Cloud: Scan Cloud when dealing with large point clouds.
- ABLS-4B4FE1A59 Revised the default names for entities so that numbering starts at 1 ("Point1", "Point 2", "Point3"... instead of "Point", "Point1", "Point2"...)
- MDUE-4D8C78CE7 Added support for Creaform Handy Probe
- JCHN-50AF6FDE5 Added settings for the sensitivity of the view rotation and the direction of the zooming when using the mouse scroll wheel.
- SROE-52F2009DB Added support for Catia V5 R21, Inventor 2012 and Pro/E Wildfire 5. This was already available in 3.1.1, but not officially announced.
- MDUE-55EAF0621 Added new predefined variables available for process automation.
- MISE-57D33E76E Added a new "Maintain Orientation" constraint type to all best-fit alignment methods. This will make handling best-fitting while holding the gravity vector much easier.
- MDUE-58D36C33C Restored a shortcut to show/hide the object manager. Now using Shift-F3.
- JCHN-5A09448BE Added sorting of the annotations by type in the Object Manager tree.
- SROE-5A2596409 Modified the Object Manager tree to display GD&T tolerances and children of their respective feature instead of being in a separate branch.
- JCHN-5B0DF44F6 Improved Device: Inspect Targets to better indicate which targets have been measured and which ones, if any, remain to be measured.
- QFUU-5B13E43BF Improved the rendering performance for large point clouds and for models with multiple complex surfaces.



- MDUE-65018189E Improved Device: Record Cloud: Scan Cloud to display the current scan line position while recording and to allow appending to an existing cloud.
- MDUE-678746A7B Relaxed some of the requirements for fitting cylinders and cones to 6 and 8 points respectively, instead of 8 and 10 previously.
- ABLS-69DFA6122 Added support for the API Radian tracker.
- JCHN-6A1C694EE Improved the default naming of annotations in order to better identify the related geometry.
- SR0E-6CBA59F2B Added support for the CATIA V5 R22 file format in File: Import: Model and File: Export: Model.
- SR0E-70F6ADD02 Modified the validation of DRFs for parallelism and perpendicularity tolerances to allow the addition of tolerances even if the "nominal" geometry is not perfectly parallel or perpendicular, such as with recorded planes.
- JCHN-7196680A2 Added a feedback message in Device: Inspect Geometry to better indicate that a measurement has been successfully collected.
- MDUE-75FF076E9 Updated online Documentation with new commands and parameters.
- MDUE-799DAA183 Added the current model name in File: Import: Models when using the "Import in Specific Coordinate System" field to better indicate which model is being processed when importing multiple models at once.

Problem Fixes

- SR0E-4A49B1D05 Fixed a crash in File: Export: Models: NX where the converter would crash for some specific model files.
- BLAT-6A82735EB Fixed a crash in Evaluate: Analysis: Surface To Points when the projected point would end-up exactly at a vertex of a non-manifold surface (i.e. some really rare stuff).
- CRAE-31D6BC1B5 Fixed an issue in Evaluate: Annotation: Point To Surface where the associated surface would not be loaded automatically when selecting the points from the object manager.
- CRAE-82EA4F8C7 Fixed an issue in Evaluate: Reports: Surface/Curve Deviation where the deviation type was always reported as Normal (never Outside) for surface and curve analyses.
- CRAE-AE5EB5A25 Fixed an issue in Construct: CS: Rotate where selecting a different Base coordinate system would not update the "About vector" coordinates.
- RLAE-25BA011CE Fixed an issue in File: Open where the visibility state of the World Axes was not applied properly.
- JCHN-98447F374 Fixed an issue with many command forms where the validation of the entered value would be done at each key press instead of once fully entered.
- ABLS-B5F6398EA Fixed an issue in Automate: Editor where the user-specified number of decimal digital was not honored.
- BIRT-000002691 Fixed an issue in Construct: CS: Coordinates/Vectors where the persistency and auto-advancing to the next field was inconsistent.
- ABLS-004DBE10A Fixed multiple issues in Edit: Surface: Trim where the result of the trim was incorrect if some of the selected trim curves were at or near the existing edges.



- SR0E-042D07CF9 Fixed an issue in Device: Record Shape: Cone where the non-offset cone would be kept if the offset value could not be applied to it (because it was larger than the smallest radius).
- SR0E-07AE0484D Fixed an issue in Edit: Paste where coordinate systems contained in a pasted group would not be included.
- TEKI-08A65ED74 Fixed an issue in Device: Align: Bundling Wizard where the Use Design Points Names was always used even when unchecked.
- SR0E-16260E62A Fixed an issue in Evaluate: Analysis: Circle to Points where the wrong center/normal was used when picking an arc instead of a full circle.
- JCHN-1F1EAA8A2 Fixed an issue in Device: Align: Best-Fit: Points where an alignment could sometimes not be computed with an otherwise valid combination of suppressed axes.
- JCHN-2024E5A9A Fixed an issue in Evaluate: Reports: GD&T Inspection where the surface profile deviations for some features would not be reported.
- MBON-2D5B2D44F Fixed an issue in Evaluate: Analysis: GD&T where distance tolerance evaluation would give varying results depending on the selection order.
- MHOG-2DE9F2223 Fixed an issue in Device: Inspect Geometry where the reported deviation for some points near the edge of some freeform surfaces would be greater than the real value.
- JCHN-36B06CDDD Fixed an issue in File: Job Information where the Company Address Line 2 was not saved correctly when creating a template.
- MHOG-383EF6C03 Fixed an issue with surface transparency where the transparency value would be reset if multiple surfaces with different values were selected at once.
- TEKI-394A073E8 Fixed an issue in Device: Align: Best-Fit: Points To Object where the reported RMS of the alignment would be 0.0 if the rough alignment was sufficient to achieve an optimal alignment.
- SR0E-3D219DDC7 Fixed an issue in File: Import: Models: [All] where using the "Harmonize Surface Normal" option could lead to corrupted surfaces if the model had two coincident faces with opposite normals, which the harmonization cannot resolve.
- TEKI-3F5684162 Fixed an issue in File: Import: Models: [All] where the "Show File Content" button was not active if the file type was set to "All supported files".
- JCHN-40F0E80C1 Fixed an issue in Edit: Point Cloud: Add where the original name of the cloud would be kept internally and used incorrectly when reporting analyses.
- MDUE-41F049CC6 Fixed an issue in File: Import: GD&T: DML where the imported features names would be modified to conform to the user-selected number of digits convention. The import should honor the original names as much as possible.
- MLIT-434538C79 Fixed an issue when picking entities in a non-displayed group but where the entity itself was visible.
- SR0E-466367359 Fixed multiple issues in Construct: Fit-To-Points and Device: Record Shape commands which had a lack of consistency and proper handling of failed fitting attempts.
- TEKI-4AF127788 Fixed an issue in Evaluate: Reports: Geometry Inspection where the reported cone axis would sometimes be reported as flipped 180 degrees from the nominal.



- MDUE-4CD0A0F84 Fixed an issue in File: Import: Points where the Display Name setting was not obeyed when importing points.
- MDUE-4CE87F59D Fixed an issue in Tolerance: [All GD&T] where the settings requesting the geometry name be used as a default for the feature name was not obeyed.
- MISE-4F798CA3D Fixed an issue in Evaluate: Annotation: Point Coordinates where an obtrusive pop-up would appear if all three Display X or Y or Z checkboxes were unchecked.
- MISE-535C9FA17 Fixed an issue with all annotations where they could be put into NoShow, but never be brought back into show.
- MLIT-5396D0B5F Fixed an issue in Automate: Editor where updates to coordinate or vector values would not be correctly applied.
- JCHN-55D87B432 Fixed an issue in the Object Manager where selecting an entity in the top section of the tree would unfold the group containing the entity below.
- MDUE-56357BCD5 Fixed an issue in GD&T tolerances where a parallelism or perpendicularity tolerance could not be assigned to a line feature.
- MDUE-5A16BBC5F Fixed an issue in Evaluate: Reports: GD&T Inspection where rectangular positional tolerances for point features were not reported completely.
- ABLS-5AA87DD59 Fixed an issue in Device: Align: Best-Fit: Points To Object where the initial rough alignment would worsen an already good alignment if lines away from the alignment surfaces were used.
- ABLS-5BF2EE170 Fixed an issue in Device: Align: Best-Fit: Points To Object and other alignment commands where the reported coordinates were not expressed in the active coordinate system, but to the World Axes.
- JCHN-5C5A9D890 Fixed an issue in Device: Align: Best-Fit: Points To Object where the progress bar would incorrectly show the RMS value as the Max deviation.
- JCHN-65A9D2083 Fixed an issue in Evaluate: Distance: Point To Surface and analysis commands where the distance reported for point at the boundary of some surfaces (with tolerant edges) would report an incorrect deviation.
- MISE-65F5D14EC Fixed an issue in File: Import where models larger than 100 meters in one dimension could not be imported into BuildIT.
- MDUE-6A77B1FE3 Fixed an issue in Construct: Plane: Fit To Points where the "Reverse Normal" option would not be correctly applied when playing a recorded process.
- MDUE-6C61AC153 Fixed an issue in Automate: Play in order to have the paths for file import/export/open/save relative to the process directory.
- YWAG-6DF6B99D9 Fixed an issue in Evaluate: Annotation: Point Inspection where the command would not be recorded correctly for process automation.
- SROE-71455AF8B Fixed an issue in Evaluate: Analysis: GD&T where parallelism and perpendicularity tolerances would be incorrectly evaluated with some combinations of probe offset values.
- MDUE-7601B4451 Fixed an issue in Evaluate: Analysis: Surface To Points where a plot would sometime not be visible on complex periodic surfaces.



- MDUE-799A850EA Fixed an issue in File: Save Display where the file type now defaults to PNG and is now persistent.
- MDUE-799D0FF40 Fixed an issue in Evaluate: Annotation: Point To Point Distance where the signs for dx, dy and dz were not consistent with the Evaluate: Distance: Point-to-Point command.

3.1.1 Service Pack 2

Enhancements

- MDUE-5CAE36F9A Added window pop-up and message bar feedback to indicate the device's warm-up level.
- BIRT-000004118 Added a confirmation dialog when attempting to close a connected broker (Leica tracker only for now).

Problem Fixes

- MDUE-5CAE36F9A Fixed an issue in the Leica Tracker AT401 broker where recording a measurement while the probe was unstable caused a deadlock.
- MDUE-6E4E2C379 Fixed an issue in File: Export: GD&T: MEA where the command would only export measurements from the active device.
- SROE-3D21148D2 Fixed an issue in File: Import: Models: [All] where the multi-selection of models for import was no longer working.
- SROE-4A456C167 Fixed an issue in File: Import: Models: [All] where some patches or surfaces would not be imported.
- MDUE-5A6864698 Fixed an issue in File: Import: GD&T: DML where the "split surfaces at discontinuities" option for CAD import would break the feature association in DML import.
- MDUE-5CAE36F9A Fixed an issue in Brokers: Leica Tracker - AT401 where BuildIT would wait endlessly when attempting a measurement while the probe was moving, but still tracking.



3.1.1 Service Pack 1

Problem Fixes

JCHN-4A9F0DD86 Fixed an issue in the Trim Surfaces command where trimming a surface would sometimes corrupt it.

MISE-52F7E7C19 Fixed an issue where exporting models as CATIA V5 files; the progress bar did not run smoothly.

3.1.1

Enhancements

JCHN-129B872DE Added a check when saving files that the specified extension matches the selected file format in order to prevent the file from being read back correctly.

RLAE-25B7FAF93 Added a new Construct paraboloid: fit to points command in order to reverse-engineer paraboloid surfaces from a measured point cloud.

MDUE-B7ED3AD55 Added a new Edit: Point Cloud: Auto-Split and Associate command to process point clouds and automatically remove outliers and associate the points to the underlying surfaces.

ABLS-0E27FF3AA Added a pop-up to remind user of Leica LTD-500 trackers to set the probe used and home the tracker from the LTM when updating the probe in Build!IT to prevent homing issues later.

JCHN-13E9436F4 Added a shortcut to the Zoom All command (Home key).

MDUE-1F7D5A627 Added alignment feedback from the points-to-object alignment command in a progress bar format

BIRT-000003881 Added all Automate, Layout, View and File Import/Export commands to the custom toolbar list of available commands.

SROE-1D97AEBB9 Added an option in the export model command to export to the Build!IT 3.1.0 format, which will be used as the baseline format for .buildit files. This was necessary because files saved directly from 3.1.1 and above won't open in 3.1.0.

MDUE-202423D92 Added an option to automatically create annotations for out-of-tolerance points during analysis.

MDUE-00450C835 Added an option to the Inspect Targets command to project the recorded measurements onto the target axis so that they sit exactly at the desired location.

MDUE-06FB716CF Added automation capabilities to key GD&T and construction commands.

JCHN-E8311BEF0 Added automation for aiming with a laser tracker.

MBON-DA435A774 Added better feedback in the message bar and report when using Device: Align: Best-Fit: Points To Object when a user-defined weighing was used. Two RMS values will be given, one without the weights applied (true RMS) and one with the weights applied (the value being optimized).

BIRT-000004117 Added key GD&T, editing and construction commands to the custom toolbar selection.



- MDUE-1F69A619C Added new materials to the list used for manual scaling with the thermal expansion coefficient.
- BIRT-000003349 Added support for the Faro laser line probe (LLP) version 3 laser scanner.
- MDUE-18B146695 Added support for using laser scanners with Inspect Targets
- MDUE-0798C0593 Added the ability in automation, for commands having devices as parameters to automatically use the active device if the parameter is left blank in the process file.
- JCHN-11ABAD910 Added the ability to apply import MMX and Build!IT files into a different coordinate system than the world. This was already supported for imported CAD files, but was not available to native Build!IT formats.
- ABLS-E2FF80BB6 Added the ability to export a model according to the active coordinate system instead of the world for STEP and IGES formats, which do not support exporting user coordinate systems.
- ABLS-DC94F909A Added the ability to sort the entity list in best-fit commands by clicking on the column headings of the pairing table.
- JCHN-12013536F Added the ability, through a right-click menu option, to explode a cloud into individual points.
- MDUE-16CDCB482 Added the possibility in automation for the "Display Message" command to be called with empty strings (Line1) in order to clear the previously displayed message.
- JCHN-F0D98D296 Changed all inspect/measure control windows to display "Press measure button to start" or "Stabilize probe to start" instead of "Waiting for measure" for clearer instructions.
- MLIT-1BDE8A8FB Cleaned-up all measurement commands to make the properties of the created geometry centralized in the application settings.
- MDUE-16C5D3A8E Cleaned-up and improved the message bar output for all Device: Record commands.
- RLAE-1C51A2C62 Cleaned-up the command form of Device: Align: Best-Fit: Points To Object so that the order and grouping is more logical and intuitive.
- MDUE-392D31BC5 Cleaned-up the command form of Evaluate: Analysis: Surface To Points so that the order and grouping is more logical and intuitive.
- MDUE-1E27EE9D4 Consolidated the various surface and curve offset commands (previously in the Construct menu) into only two commands under the Edit menu.
- YGLV-F3035A56A Improved message bar reporting of multiple commands when applying them.
- MDUE-ECA2326C4 Improved support of the API I360 probe so that a continuous press of the hardware button is no longer required to get accurately compensated data in Inspect Geometry and when recording distance or time-triggered clouds.
- MDUE-028A8523F Improved the Evaluate: Analysis: Surface To Points in order to generate plots with a better rendering, and to also allow filling the entire surface with the plot, extrapolating from the measurement set.
- JCHN-9DD515149 Improved the feedback of many commands that require significant processing time by displaying a clearer progress bar.
- BIRT-000004116 Improved the File: Save Display command to be persistent and include a new PNG format (best quality/file



size) as an option.

- RLAE-643200FF2 Improved the handling of the mouse scroll-wheel in Build!IT. The focus of the scroll now automatically follows the mouse (no need to click) and behaves more sanely within commands.
- MDUE-1FCFE2383 Improved the message bar output of the Evaluate: Analysis: GD&T command to give better feedback on the evaluated tolerances and better explanations when tolerances could not be evaluated.
- MBON-F01FAF594 Improved the Parasolid and NX databridges
- QFUU-07A2C2ECE Improved the performance and the resulting fit of the Construct: *: Fit to points and Device: Record Shape: * commands when "Apply fitting tolerance" was used.
- ABLS-1858BF7A2 Improved the performance of Device: Align: Best-Fit: Points To Object for both RMS and Maximum deviation minimization methods when using surfaces.
- MDUE-16D281F47 Improved the performance of importing GD&T surface features from a DML file.
- SROE-D86B10AE7 Improved the performance when importing Catia V5 assemblies.
- MDUE-7D8D08D8A Improved the picking filters for circle centers to work also with circular trims on surfaces and merge cylinder top/bottom end-point filters so that the nearest end-point is selected from a single filter.
- MDUE-028B22AA9 Modified the F2 shortcut key to follow Windows typical behaviour and rename the selected entities instead of showing/hiding the Object Manager.
- BIRT-000002689 Modified the layout of the measurement association creation command to make it much easier to create a series of associations. Hint: perfect when used in combination with the middle-mouse-click shortcut to apply the command.
- MDUE-1E206A837 Removed the obsolete Inspect Feature command. More intuitive and powerful workflows can be accomplished using Inspect Geometry and Automate!IT processes.
- ABLS-0757CA5DF Updated the report formats to include information regarding the saved alignment in the device summary sections.

Problem Fixes

- LJEA-004F29E0F Fixed a crash in Construct: Cloud section: Interactive that could happen when picking clouds in some cases.
- LJEA-023A18016 Fixed a crash in Construct: Curve: Fit to Points Tolerance when only a single point was selected for the fit (which is invalid).
- SROE-07AED5047 Fixed a crash when cutting grouped GD&T features
- BLAT-0B8C3ABDF Fixed a crash in Edit: Surface: Trim when some of the selected trim curves did not intersect
- SROE-1013AFE01 Fixed a crash in Automate: Play when trying to run a command referencing an entity that did not exist.
- JCHN-10B806949 Fixed a crash in View: Put in NoShow by Color when group picking was enabled and a group was selected from the viewport.



- MDUE-12DFA5092 Fixed a crash when attempting to play back a recorded process while recording another process
- SR0E-153E8E75D Fixed a crash in Construct: Curve: Fit To Point Freeform when attempting to use an existing cloud's name by picking it from the viewport to name the resulting curve
- MHOG-176D082B3 Fixed a crash in Edit: Point Cloud: Sample when trying to sample single points as part of a selection of multiple clouds/points.
- JCHN-2ACC89FEC Fixed a crash in View: Save View when the name of the saved views conflicted with one of the built-in views (Top, Bottom, Front...).
- MHOG-305739D0A Fixed a crash when moving annotations in the 3D view where the cursor would remain stuck if the ALT key was released before the mouse button.
- BLAT-34171D5FA Fixed a crash when copying and pasting measured points and attempting various operations on the resulting (constructed) points.
- AFRE-08E2A1592 Fixed an issue in the 3D view where hiding a plot would also hide the supporting entity's label.
- CSTT-4655C3956 Fixed an issue in the Object Manager where the "Sort" button did not sort the groups.
- GSYS-DF3D4EC6F Fixed an issue in Layout: Measurement Association: Delete where associations could not be deleted if the entities were grouped.
- RLAE-25BC889B3 Fixed an issue in Edit: Surface: Offset where a new surface would be created even when the option to do so was unchecked.
- RLAE-25BCC1472 Fixed an issue in Construct: Cylinder: Fit to Points where the cylinder axis was always created, regardless of the "Create Center Line" option.
- RLAE-3A5593317 Fixed an issue in Layout: Measurement Association: Measurement Data where the values in the form were not initialized with the values from the selected points.
- RLAE-40C104106 Fixed an issue in Device: Record Shape: Cylinder where the orientation of the fitted cylinder would "jump" around with each measured point.
- RLAE-50D0EB737 Fixed an issue in Evaluate: Distance: Point To Point where the behaviour of the "Apply" button was inconsistent.
- MBON-A2409C255 Fixed an issue in Construct: Point: Fit To Points where associations (when applicable) were not created as they should.
- SR0E-A7B4B328F Fixed an issue in all commands where it was not possible to pick an entity that was selected before the command was opened.
- LJEA-AD2FFC48C Fixed an issue in Evaluate: Analysis: Surface To Points where the color scale, the color plot and the report would give unclear results with "compute limits" if all the measurements had the exact same deviation (happens only with "faked" results or using the simulated device).
- JCHN-AF3900A3C Fixed an issue in Construct: Point: Project Point To Surface where a warning about a probe offset of 0 was displayed when not relevant (for design or constructed points).
- JCHN-B11AF6D16 Fixed an issue in Construct: Cloud Section: Parallel where a cross section cloud would not be created for the



last cross section plane.

- JCHN-BF49A15CB Fixed an issue in Layout: Annotation: Point Inspection where the background color field would incorrectly report an annotation as transparent.
- SROE-CEFCB5C8E Fixed an issue where the vector panels used the setting for distance values rather than non-distance values regarding the number of digits to display.
- LJEA-D9F242E0E Fixed an issue in multiple Construct commands where the information reported in the message bar was incorrect if the active coordinate system was left-handed.
- LJEA-DAAAA14D5 Fixed an issue in Inspect Geometry where the build arrow colors did not correctly reflect the deviation when a left-handed coordinate system was active.
- SROE-E07A62DB8 Fixed an issue in the File: Import: Model and File: Export: Model where the parameters used for the command were not persistent.
- SROE-EBBAA3A4A Fixed an issue in the 3D view where plots would be set to invisible if their supporting entity was hidden, but could never be made visible again.
- TEKI-EFDC36335 Fixed an issue in Device: Inspect Point: Circle Point where the targets would not be displayed during playback in automation.
- MLIT-F0854672C Fixed an issue in Construct: Surface: Fit To Points where the created surface would never be associated to the measured points used.
- MLIT-F20D8EC98 Fixed an issue in Layout: Annotation: Point Inspection where the annotations title would not be initialized properly when editing it.
- BIRT-000004153 Fixed an issue in Layout: Annotations: Error Needle where the focus would not return the needle field after applying, preventing efficient use of the command for creating multiple annotations.
- BIRT-000004235 Fixed several issues related to importing points into Build!IT and streamlined the import dialogs.
- SROE-F98237A8A Fixed an issue in Layout: Group when attempting to group and already-grouped entity.
- MDUE-FB0FAE45B Fixed an issue in Device: Inspect Geometry where the measured point would be associated to the incorrect entity in some cases.
- SROE-FBCBBE070 Fixed an issue in multiple commands when dealing with entities that had the same name, with different use of capitalization.
- ABLS-FC5871C8B Fixed an issue in File: Import: Models: Catia V4 where coordinate systems marked as "unfixed" in Catia were not imported.
- JCHN-FAEA7155C Fixed an issue in many commands where disabled fields could still be highlighted.
- JCHN-FEB3FF1A1 Fixed an issue where the names of coordinate system were not conserved when exporting in Catia V4, V5 and ACIS sat files.
- JCHN-003D43A37 Fixed an issue in multiple Construct commands where the "Skip Name" setting was not listened to.
- MLIT-00893AAAB Fixed an issue in the 3D View where displaying points as "Square" or "Triangle" would also render the annotations without a background.



- ABLS-023AC9991 Fixed an issue when picking coordinates with the "Surface: On" filter near the seam of a cylinder would lead to points created at a seemingly random location on the surface.
- MDUE-02D73B42E Fixed an issue in Device: Align: Best-Fit: Points To Object where selected-but-deactivated entities were recorded in the automation script as active.
- SROE-042EBC1A5 Fixed an issue when picking coordinates with the "Curve: Intersection" filter would lead to the wrong coordinate being selected or no intersection found at all.
- TEKI-056D04D06 Fixed an issue in View: Zoom All where the origin of the World Axes would be incorrectly included in the zoomed area when annotations were displayed on the model.
- JCHN-066416198 Fixed an issue in File: Open and File: Save where the default directory was not updated when a previous file was opened from the "Recent File" list.
- ABLS-074FBCD6F Fixed an issue in File: Import: GD&T: DML where persistence of the options was not properly saved.
- TEKI-08ED70B01 Fixed an issue in Device: Align: Best-Fit: Points To Object where the report was missing some entities when the same nominal entity was in multiple pairs.
- JCHN-0A575382C Fixed an issue in Device: Inspect Geometry so that the surface being inspected is displayed properly (shaded) when the model is displayed in wireframe.
- SROE-0BE352723 Fixed an issue when cutting-and-pasting a group. The pasted entities would be visible in the pasted group's tree, but not the main tree.
- LJEA-0D2BABC2F Fixed an issue in Device: Align: Best-Fit: Points To Object where the weight shown in the report was not the user-entered value. The alignment was always computed correctly, only the reporting was problematic.
- TEKI-0D785EF24 Fixed an issue in Edit: Point Cloud: Add where the class (Design/Constructed/Measured) of the resulting cloud was incorrect.
- JCHN-0FAE17CF4 Fixed an issue in Device: Record Shape: Cylinder where the cylinder radius options were not persistent.
- MHOG-10B64CBF1 Fixed an issue in Device: Align: Best-Fit: Points To Object where the command would continue to converge when clicking on the apply button multiple times.
- JCHN-124A3C79D Fixed an issue in Edit: Surface: Untrim where the resulting model could not be saved with some specific surfaces.
- JCHN-12502B796 Fixed an issue with the Simulated Device where the center point of the simulated data was not expressed in the active coordinate system.
- MDUE-161AA0748 Fixed an issue in some report functions where the device summary was not included when running from automation.
- MDUE-16C3E4306 Fixed an issue in Device: Align: Best-Fit: Points To Object where running the alignment would not invalidate the current saved alignment in the Device toolbar.
- MDUE-16C6080DB Fixed an issue in Automate: Play where the displayed user messages would not be visible when using a white background.
- MDUE-16D03B523 Fixed an issue in Device: Inspect Geometry when inspecting entities with long names. The name is now



truncated in the middle, allowing the user to see the start and end (with the index number) of the name.

- MDUE-16D0BF446 Fixed an issue in File: Import: GD&T: DML where the GD&T feature would be imported without any supporting geometry if the "Create features for undefined geometry" option was unchecked. The feature is now completely omitted in this case.
- MDUE-1E228BEEC Fixed an issue where the surface profile tolerance evaluation did not take into account the probe offset.
- MDUE-1F1AB99AE Fixed an issue where the measured points exported through the MEA format did not include the probe offset compensation.
- MDUE-1F1D3027F Fixed an issue where surface profile tolerances were only evaluated if they were defined on "surface" features (which could be defined for any surface type). The user interface allowed the creation of such tolerances on plane, cylinder, sphere or cone features, but did not evaluate them.
- MDUE-1FC0A8C2A Fixed an issue in Evaluate: Reports: Surface/Curve Text with the "True Position" template to report the O/T value as a diameter offset (x2).
- MDUE-20652448B Fixed an issue with the Leica AT401 tracker where the Build!IT two-face check would give incorrect results.
- MDUE-20656A90A Fixed an issue in Automate: Play when multiple reports were generated in quick succession where the screen shot of the report would be of the previous PDF opened in Acrobat Reader.
- JCHN-21C92E859 Fixed an issue in Device: Inspect Point: Fit Point where the deviations reported for some points was not updated when the same nominal point was measured multiple times.
- SR0E-26A00CF2D Fixed an issue in the Installer where some required drivers (Sentinel and MSXML) were not properly installed on Windows XP 64-bit platforms.
- ABLS-2D4BA8AAA Fixed an issue in Device: Align: Best-Fit: Points where incorrect maximum deviation values were given in the report when running in automation.
- JCHN-2D553947B Fixed an issue in Device: Record Shape: Circle where some of the projection options would always be disabled.
- SR0E-2DF987E51 Fixed an issue in Device: Record Shape: Cone where the "Offset for Probe Radius" option was ignored and the offset always applied.
- LJEA-2FA046690 Fixed an issue in Evaluate: Analysis: Surface To Points where the "Treat deviation as absolute" option would become disabled and could not be re-enabled.
- LJEA-2FE6FD430 Fixed an issue in Evaluate: Analysis: Curve To Points where the Inner scale limits were not validated correctly, possibly leading to weird-looking plots.
- TEKI-31297BE75 Fixed an issue in Evaluate: Angle: 3 Points where the angle would not be reported for some combinations of points.
- BLAT-34104D805 Fixed an issue in File: Settings where the "Display Trim Curves" option for surfaces was not saved correctly.
- SR0E-35B85C7BD Fixed an issue in Device: Inspect Geometry where the annotations created automatically did not show the correct negative tolerance if the "Surface (-) side same as (+) side" option was set.



3.1.0 Service Pack 2

Problem Fixes

- SROE-1BEA5C484 Enable the Edit: Surface: Trim and Edit: Surface: Intersect Planes commands when a desktop-only (no device brokers or CAD databridge) license was used. These commands were previously incorrectly disabled.
- SROE-1BE98BE03 Fixed the error message displayed to the user when opening files from a more recent version. This will be required to correctly inform the user about incompatibilities when 3.1.1 is released.
- BLAT-1BE8F7773 Fixed an issue in Inspect Geometry where for some rare surfaces, Build!IT would incorrectly report the probe as outside the surface (deviation between parentheses) and with a high deviation when it was in fact above and near the surface.

3.1.0 Service Pack 1

Problem Fixes

- YGLV-BE4E68C98 Restored the ability to display all the trim curves of surfaces. We have also added settings to control the thickness and color of these curves.
- MDUE-10574C925 Fixed an issue in Inspect: Point: Fit Point where the F7 and F8 keyboard shortcuts to decrement/increment to point number to inspect weren't functioning.
- MBON-11EBEFAC4 Fixed an issue in the Align: Best-fit: Points to Objects report where the reported weight values did not match the values entered by the user and used for the alignment.