UTStudio 3 Public Manifest Release 3.9.6

Minimum System Requirements

Pentium 600-megahertz (MHz) processor or faster

At least 2 gigabytes (GiB) of RAM

At least 250 megabytes (MiB) of available space on the hard disk

One of the following operating systems:

- Windows XP (32-bit version with Service Pack 3 installed)
- Windows Vista (32- or 64-bit version)
- Windows 7 (32- or 64-bit version)
- Windows 8 or 8.1 (32- or 64-bit version)

Feature Matrix

Features	UTStudio Viewer (Free)	UTStudio Standard
Read and analyse UTDATA and UTCFG files	Х	Х
A/B/D/L/S-scan views	Х	Х
Top/Side/End/C-Scan projected views	Х	Х
TOFD views	Х	Х
Export acquisition data to a CSV format		Х
Create UTCFG files		Х
Produce reports		Х
Layout and workspace management		Х

2015-11-05 UTStudio Standard & Viewer 3.9.6

Revision 0f2f712f

UTStudio 3.9.6 can open data (.utdata) and configuration (.utcfg) files from these devices:

- Veo (all versions)
- Prisma (all versions)

UTStudio 3.9.6 produces configuration (.utcfg) files that are compatible with these devices:

- Prisma (3.9.6 and later)
- Veo (3.9.6 and later)

Fixed Issues

None, follows VEO and PRISMA software version ID.

Known Issues

G-336 UTStudio: Gates shown along angular cursor don't stay attached when unlink

G-335 UTStudio: Wrong maximum amplitude value in L-scan annotation area for non-rectified signal

G-331 Error or missing measurement when moving angular cursor with mouse

G-280 Measures in Part References don't consider Encoding Area offset+rotation

G-277 UTStudio 3 should have a 64-bit version (a 64-bit version will be available with the next software release)

G-232 UTStudio: graphical dimensions in 3D view are not exported in report

G-231 Redundant info in 3D view and wrong abbreviation used for focal distance

G-49 When wedge is reference, error in distance between C and E cursors on merged C-scan

C-252 GPIO config lost when utcfg saved from UTStudio

C-250 Wrong proposed file name when exporting to csv from S-scan view

C-248 Change the default value for Elmt Diameter of a mono circular probe

2015-09-24 UTStudio Standard & Viewer 3.9.3

Revision 6c72948

Important Notice

UTStudio 3.9.3 can open data (.utdata) and configuration (.utcfg) files from these devices:

- Veo (all versions)
- Prisma (all versions)

UTStudio 3.9.3 produces configuration (.utcfg) files that are compatible with these devices:

- Prisma (3.9.3 and later)
- Veo (3.9.3 and later)

New Features & Improvements

G-139 New inspection wizard - change S-Scan start angle 35°

G-118 Set fixed aspect ratio to false on L-Scan (now wide by default)

G-79 Add real depth data to annotation table

G-64 Add a new measurement from wedge (to include X offset as per D-Series)

G-53 Révision Layout / Templates / Examples / New Inspection Wizard

G-41 Use hyperbolic cursor for annotations in TOFD

G-38 Crosshair mouse in views of UTDATA file

Fixed Issues

- G-283 UTStudio: Correction of annotations table in French
- G-275 UTStudio: not able to add comments to annotations

G-269 UTStudio crash when zooming in B-scan having annotation

G-244 X Offset is out of range

G-235 Peak indicator displayed at incorrect location

G-212 UTStudio: Change the Report Type tooltip message

G-208 File Name generation

G-206 UTStudio: Multiple errors in 3D Views

G-203 UTStudio: manipulating IFT gates issues when having more than one sheet

G-119 Angular box not correctly positioned in L/S scan.

G-98 Gate Width can be set to negative values

G-77 Make gate level adjustment rounded anytime

G-70 Add Hyperbolic Cursor spawns always towards bottom right

G-55 Minor measurements mistmatch between TOFD measure bar and TOFD view cursor

Known Issues

G-336 UTStudio: Gates shown along angular cursor don't stay attached when unlink

G-335 UTStudio: Wrong maximum amplitude value in L-scan annotation area for non-rectified signal

G-331 Error or missing measurement when moving angular cursor with mouse

G-280 Measures in Part References don't consider Encoding Area offset+rotation

G-277 UTStudio 3 should have a 64-bit version (a 64-bit version will be available with the next software release)

G-232 UTStudio: graphical dimensions in 3D view are not exported in report

G-231 Redundant info in 3D view and wrong abbreviation used for focal distance

G-49 When wedge is reference, error in distance between C and E cursors on merged C-scan C-252 GPIO config lost when utcfg saved from UTStudio C-250 Wrong proposed file name when exporting to csv from S-scan view C-248 Change the default value for Elmt Diameter of a mono circular probe

2015-01-21 UTStudio Standard & Viewer 3.8.2

Revision 240c3562

Important Notice

UTStudio 3.8.2 can open data (.utdata) and configuration (.utcfg) files from these devices:

- Veo (all versions)
- · Prisma (all versions)

UTStudio 3.8.2 produces configuration (.utcfg) files that are compatible with these devices:

- Prisma (3.8.2 and later)
- Veo (3.8.2 and later)

Issues fixed

- #7168 The wedge delay cursor now uses the same distance units as the ruler.
- #7064 If the layout only contains 'config' elements (3D, summary, measurements), we now warn the user that it is not a supported
- feature.
- #7040 Fixed crash when exporting PA view to CSV.
- #6656 Removed some unneeded version mismatch warnings.
- #6650 Fixed a memory leak that could have degraded the user experience over time.
- Minor UI improvements.

2014-11-26 UTStudio Standard & Viewer 3.8.1

Revision 9cd1dd105b6

Important Notice

UTStudio 3.8.1 can open data (.utdata) and configuration (.utcfg) files from these devices:

- Veo (all versions)
- · Prisma (all versions)

UTStudio 3.8.1 produces configuration (.utcfg) files that are compatible with these devices:

- Prisma (3.8.1 and later)
- Veo (3.8.1 and later)

New features

- Provide full compatibility for Veo and Prisma 3.8
- S-Scan/L-Scan: Add button for Stretching view aspect ratio to take all available space.

Issues fixed

• Annotation: In Depth mode, annotation should report the closest measure, not the farthest, #6681

- utprobe/utwedge/utcfg: Make various adjustments to example files #3713 #6993 #7002
- utprobe files: Do not save connector id in probe definition, #3147
- Wedge: Change step of X-Offset to 0.1mm, #3615
- Scan: Contouring default value now 2%, don't reset when toggling on/off, #5354 #6128
- Scan: Default smoothing value now "High", #6958
- Scan Prisma Filters: Prioritize Mid filter for [2.0 MHz, 9.1 MHz] mono probes, #5063
- IFT: fix negative IFT in RF, and handling of Top and End views when IFT not triggered. #6629
- TOFD: Straightening parameter was not restored properly on file load, #4501
- Prefs: Deprecate A-Scan Range, #5157
- S-Scan/L-Scan: avoid Circular ruler overlapping the scan when view is small
- S-Scan/L-Scan: fix zoom issues when changing parameters, #6791 #6877
- UI: Fix some layout names #7041
- UI: Update French, Russian and Chinese translations

2014-08-14 UTStudio Standard & Viewer 3.7.1

Revision b30457a

Important Notice

UTStudio 3.7.1 can open data (.utdata) and configuration (.utcfg) files from these devices:

- Veo (all versions)
- Prisma (all versions)

UTStudio 3.7.1 produces configuration (.utcfg) files that are compatible with these devices:

- Prisma (3.7.1 and later)
- Veo (3.8.1 and later, as there was no 3.7.1 release for Veo)

New features

- Encoder: Create new "Trigger at PRF" parameter for single encoder mono-element scans.
- Config: Added warning if the encoder precision is too sensitive for fast encoding speeds.
- View: Weld overlay now has a different color than view grids.
- View: Added ability to save Reference A-Scans.
- UI: Gate key (G) now reselect previous gate, fixes #6466

Issues fixed

- IFT: fix negative IFT in RF, and handling of Top and End views when IFT not triggered. #6629
- · Layouts: some layouts with B-Log views were erroneously labeled as C-Scan
- Palette Editor: Add an explicit "rename palette" button.
- Cursor: have better icon for Link cursor, fix #6662
- Part: Allow changing weld parameters in Analysis, fixes #5730
- S-Scan/L-Scan: Improve zoom restore, fixes #5923
- S-Scan/L-Scan: Extractor sometimes disappeared at specific zoom factor
- S-Scan/L-Scan: Avoid circular ruler labels overlapping the scan when view is small
- S-Scan/L-Scan: Toolbar buttons for Zoom in/out now works for S-Scan/L-Scan views, fix #6305
- Views: allow 24 views per sheet.
- Pitch and Catch: Probe Center Spacing (PCS) sometimes was reduced in half, fixes #6464
- UI: Only show "Stream Direction" on pipe part
- Manual Index Encoder: hide "Invert Dir" parameter when index encoder is Manual, fixes #3994

2014-06-03 UTStudio Standard & Viewer 3.5.13 Beta

Revision 7759d9c Featuring

View: Rulers now have a smaller granularity.

Fixed:

- Veo setups: Allow 6 probes setup, since it was allowed in 3.2.5, fixes #6095
- DAC/DGS: drawing loops back to zero when points too high (with Ref Correct) #6074
- View: A-Scan: Improve Grid alignment, fixes #6081
- View: Thickness B-Scan (B-LOG): fix when using ref gate #5955, and with Imperial system
- View: C-Scan: improve behavior when using with IFT. #6171

2014-02-10 UTStudio Standard & Viewer 3.5.9R2

Release 1 Revision 6554d5bRelease 2 Revision e292c88 Featuring

- New Palette Editor feature.
- Annotations can now be created in S-Scan, L-Scan, B-Scan and Merged views in addition to previous views.
- · CSV Export:
 - 1. Added options to extract individual scans, frames and/or focal laws (#4863)
 - 2. Can export a single S-Scan, L-Scan or A-Scan directly from the right-click menu.
 - 3. Can now be exported in Amplitude (%FSH) format.
 - 4. Can export from a B-Scan view (#5058)
 - 5. Can export from a B-Log view (#5170)
- Add "Open Recent File" action in toolbar.
- Introduction of Zoom function into S-Scan, L-Scan
- View: Reference A-Scan
 - Save Reference A-Scan (A-Log) into configuration file (.UTCFG)
 - Export Reference A-Scan (A-Log) into CSV file
- View: Addition of fixed depth Palette, can be extended out of min/max range.
- View : New grid type: Dots (Graticule)
- View: Dual Polarity Gate/Box: added as view option when scan is not rectified, controls how C-Scans, Top and End views are extracted (positive, negative or RF spectrum).
- 3D view: add stream direction.
- Measurements: Allow multiple selections in Measurements tab (Using CTRL or SHIFT-click).
- Config Summary: show errors and tips at top of window instead of bottom.
- Scan: Prisma UT filters renamed to Low-Mid-High-Broad, #4589

Fixed:

Release 2

- Fix cursor/annotation mouse issue occurring randomly in S-Scan or L-Scan if start path > 0mm, fixes #6043
- Fix crash on double-clicking Close file button, fixes #5956
- Fix slow S-Scan/L-Scan rendering when zoomed in, fixes #5641
- Update Russian translation.

Release 1

- Compatible with both Veo and Prisma files v3.5.9 or earlier.
- General: repair some example utprobe and utwedge files.
- General: CSV: fix crash when extracting CSV from files with a very large number of frames. #5059
- TOFD: increase precision of Lateral Wave params to 3 units after point, fixes #4937
- Views: Top and Merged Top views only considered positive spectrum in RF mode. #4705
- · Views: Merged Top View: Sometimes did not refresh when moving box.
- Views: Thickness B-Scan (B-LOG): Depth/Amplitude mode were inverted #5996
- Views: Thickness B-Scan (B-LOG): The reference gate was not considered, fix #5850.
- Views: C-Scan: improve behavior when using with IFT.
- Views: "No data" color (missed frame) used in more views.
- Views: Don't refresh merged views twice for each change.
- 3d view: HAZ cannot be hidden when using U/J welds. #4690
- 3d view: Refresh legend and measures when changing Unit System.
- 3d view: Gates in 3d view now show flank position when in flank mode #5171
- 3d view: refresh when toggling part visibility.
- Measurements: Angular cursor label should not fall outside view, fixes #5072
- Measurements: Annotations were always Purple. #5081
- Report: Add info for freehand cursor, fixes #2566
- Report: Could not generate a report using only "3D View Info". #4689
- Help: Different help documents for Prisma and Veo files.

Revision fd6fe91 VEO Compatibility Notice:

• UTStudio 3.4.4 can open files from Veo. However, UTCFG, UTDATA, UTWEDGE and UTPROBE files modified in UTStudio 3.4.4 canno t be opened on the Veo 3.2.5 since UTStudio now converts to a new internal file format. You must keep the previous UTStudio version if you want to be able to bring files from UTStudio to the Veo device.

Featuring

- Annotations: Add right-click options to configure defect zone range:
 - 1. Bonding ratio
 - 2. dB or amplitude range for amplitude views
 - 3. Thickness range for thickness views
- Updated User Manual (merged with Quick Start Guide, now only one document).
- Show tips and error messages at top of Summary view.
- Faster Merged C-Scan rendering in Conventional mono-element setup.

Fixed:

- Fix important regression issue #4933 when loading multi-scan files recorded at an acquisition frequency different than 100 MHz.
- Prevent annotation window from re-opening itself when changing tab, fixes #4972
- Report: Merged top view did not have proper name in PDF.
- Report: Annotation for Center pos printed wrong value on unused axis, fixes #4748.
- Various other annotation fixes.
- · Fix swapping views.
- Fix rare issue selecting second-to-last focal law with cursor.
- Remove "Recording Device full" erroneous tip.

Known issues:

- · Zoom not supported yet in A-Scan, S-Scan and L-Scan
- · Index axis measures for Annotations are always in "Part Reference" in Merged views
- Cannot save files for the veo (see above compatibility notice)
- Software gain does not affect depth top/end views (the IFT gate is triggered prior to apply the software gain)
- · Measurements in Annotation box are incorrect if the cursor is out of view (negative value)

2013-04-26 UTStudio Standard & Viewer 3.4.3 Release 1 Revision 14a2e194

VEO Compatibility Notice:

 UTStudio 3.4.3 can open files from Veo. However, UTCFG, UTDATA, UTWEDGE and UTPROBE files modified in UTStudio 3.4.3 canno t be opened on the Veo 3.2.5 since UTStudio now converts to a new internal file format. You must keep the previous UTStudio version if you want to be able to bring files from UTStudio to the Veo device.

Featuring

- UTStudio now opens a new window for each open file
- Sessions are now saved in the UTDATA file instead of being separate files
- Add Unlink Cursors Feature
- Add Annotation capability (for TOP, Merged TOP, C-Scan and Merged C-Scan):
 - 1. Table of measurements (including: center box position, max X, max Y, 6dB Drop area, Standard deviation, Bonding Ratio)
 - 2. Save annotations to UTDATA file
 - 3. Save Analysis layout to UTDATA file
 - 4. Add annotation table to PDF report
- Re-arranged all menus and toolbars
 - 1. Added multiple view options as toolbar buttons
 - 2. Added buttons to toggle Unit System and Background color quickly
 - 3. Right-Clicking on a cursor, an annotation or a view yields different context menus
 - 4. Better icons
- New Report dialog and Export to CSV dialog
- Save data into CSV files (Comma Separated Value) in native acquisition resolution for C-Scan and Merged C-Scan
- Use checkboxes to toggle parameters
- Curved parts support in UT :
 - 1. New type of part added : "Inside Pipe (ID)" and "Outside Pipe (OD)"
 - 2. Defect positioning on 3D curved part
 - 3. Curve Part Measurement (Depth and Surface Distance considering curvature)
- 3D View

- 1. Phased Array: Graphical representation of RX delay in 3D views
- 2. UT: Curve part Rendering
- Add Duplicate and Clear tab options
- · Support Windows 8 pinch zoom gesture in 3d view and encoded views

Fixed:

- Grids did not immediately appear/disappear in A-Scan analysis, fix #2778, fix #4061
- B-log: adjust view to consider IFT
- Draw grids under A-Scan signal, fixes #4606
- Change analog filter strings according to bug #4589
- Show English help files when no translation is available, fixes #4247
- Improve movement and default position of freehand cursors in TOFD view, fixes #4665, #3507
- Fix multiple 3D view issues
- Top view did not filter unrectified (RF) data correctly
- Save maximized window status
- Reset zoomed frames properly when double-clicking in zoom bar
- Allow edition of inspection details (inspector name, site, etc) in UTDATA

Known issues:

- · Zoom not supported yet in A-Scan, S-Scan and L-Scan
- Index axis measures for Annotations are always in "Part Reference" in Merged views
- · Cannot save files to the veo (see above compatibility notice)
- Software gain does not affect depth top/end views (the IFT gate is triggered prior to apply the software gain)
- Measurements in Annotation box are incorrect if the cursor is out of view (negative value)

2013-02-22 UTStudio Standard & Viewer 3.3.4 Release 1

Resision e2cfc03a

VEO Compatibility Notice:

UTStudio 3.3.4 can open files from Veo. UTCFG, UTDATA, UTWEDGE and UTPROBE files modified in UTStudio 3.3.4 cannot be
opened on the Veo 3.2.5 since UTStudio now converts to a new internal file format. You must keep the previous UTStudio version if you
want to be able to bring files from UTStudio to the Veo device.

Featuring

- 3D views rendering had a major update. HAZ...
- New ".utprobe" and ".utwedge" extension for Probe and Wedge files.
- Support for new Prisma product.
- Part: Part menu now before Probe.
- Part: Added Graphite/Epoxy to material list (#3661)
- Wedge: simplified usage in Conventional/TOFD, with X-Offset and Refracted angle instead of Cut Angle.
- · Layouts: Show if Top/End/C views are in depth or amplitude mode in layout popup image.
- Layouts: Added layouts with 3d view.
- Curved Part (trial mode)
- Scan: Renamed Delay to Zero
- Scan: Added Contouring and Reject options
- Scan: Show actual velocity value in Wave Mode list
- Add U-Weld, J-Weld
- Add "A-Scan Range" preference to allow seeing up to 200% FSH in the A-Scan
- Report: add Amplitude Tolerance for Sensitivity and TCG calibrations
- Views: Add export to png image in views right-click menu (#2814)
- SummaryWindow: added Part velocity, X-Offset

Fixed:

- Re-ordered some parameters.
- · Various performance improvements (especially A-Scan rendering).
- Add new files to Recent file list when saving.
- #3909 Remember last folder when saving .CSV files.
- #3532 "Save As" could save wrong file when multiple files were loaded.
- #3393 Save Probe with no wedge, dont give ask to save integrated wedge.
- #3984 Measurement List: Better sorting order.
- #3971 Measures did not work in TOFD anymore.
- Depth C-Scan View now considers square box threshold.
- Don't allow modification of target product in UTDATA file.

Known issues:

- Zoom not supported yet in A-Scan, S-Scan and L-Scan
- · Software gain does not affect depth top/end views (the IFT gate is triggered prior to apply the software gain)

2012-11-15 UTStudio Standard & Viewer 3.2.5 Release 3

Release 1 Revision 1b55b89Release 2 Revision 079da44Release 3 Revision 09f6767 Featuring:

UTStudio-specific changes

- Add maximize view feature by double-click titlebar or click on Maximize button.
- · Config files tabs stack vertically instead of horizontally
- Allow config pane to be resized to a smaller width
- Suggest filenames when saving reports and in "Save As" dialog
- Show parameter errors in status bar
- New application icon
- · Activate window when there is an existing application instance
- Better screen layout on first start after new installation
- This version allows to create and analyze files of VEO 16:64 and VEO 16:128
- Layouts for 5 & 6 scans are available (16:128 only)
- New B-Log view (in analysis)
 - 1. Present part end view of multiple beams in the same encoded view
 - 2. Extract Data from gates to show B-Scan, minimum, average, and maximum part thickness in one view
 - 3. Amplitude and Depth view using flank or peak as reference.
 - 4. Limitation: Only supports probes at 0 degree
- TOFD enhancement
 - 1. Edit the PCS directly with the new "Geometry" options for paired probe
 - 2. Calibrate your TOFD scan with 1 parameter "Ruler LW Position"
 - 3. Added feature: Lateral Wave Removal
- Measurement overlay enhancement for readability
- When adding new probe/scan, ability to copy existing probe/scan
- Ruler considering skip cursor (bound to weld overlay feature)
- Add X-Series probes to probe database
- HAZ in the 3D view (View option)
- Remove delay induced by wedge geometry in TOFD (to behave like Conventional)
- · Combined "Top ruler", "Bottom ruler", "Left ruler" and "Right ruler" in a single "Rulers" option
- Combined "Horizontal Grid" and "Vertical Grid" in a single "Grids" option

Fixed:

 Support of new file format created VEO 3.2.5 R3 <u>Release 2</u> (#3513) - UTStudio: Report is incorrectly drawn when view is maximized
1. (#3513) - UTStudio: Report is incorrectly drawn when view is maximized
1. UTStudio: B-Scan had wrong orientation by default
Release 1
1. (#3367) - Fix Unexpected missed frames
1. (#3311) - 3D view: size of part is proportional to scan area
1. (#2972) - TOFD BW Ruler calibration enhanced
1. (#2524) - 3D views part in the Report are not well displayed
1. (#1933) - 3D Views tag's Title are not updated when we change Display Mode in Properties
1. (#3368) - Unexpected beam exit point outside wedge error while using a 64 elements probe.
1. (#3226) - Rename "Rectangular Box" & "Square Box" to "Extraction Box"
1. (#3049) - Mono, Config issue when changing Dual Crystal to Mono Crystal.

1. (#3045) - CSV in amplitude, bad header
1. (#2686) - Wizard DAC, Nb Sub-levels not keep if return in DAC wizard
1. (#2958) - Fix some measures not refreshed when changing unit system.
1. (#2678) - Wedge type = None, Hide Identifiers and Setting categorize menu
1. (#3154) - Enhance error message labels for understandability
1. (#1624) - The measurement for each cursor are customized on a cursor type bases
1. (#3050) - S-Scan, Stop angle cannot have less than 70deg in specific scenario
1. (#2842) - Add Cartesian Cursor in Merged views init pos. at the top left corner of the views. (specific file)
1. (#2957) - Palette color scaling is not correct in C-scan Depth mode in Imperial.
1. (#2783) - Missing Ampl. Low and Ampl. High parameters in View tab for TOFD type scan
1. (#3140) add software gain in report
1. (#3196) "C1-E1 Dist Scan" measure marked as Invalid in UTStudio
1. Increase maximum zoom level in encoded views
1. Wedge Reference Pos was not centered when using a PA probe without a wedge

Known issues:

- 1. Zoom not supported yet in A-Scan, S-Scan and L-Scan
- 2. Software gain does not affect depth top/end views (the IFT gate is triggered prior to apply the software gain)

2012-01-16 UTStudio Standard & Viewer 3.2.1 Release 1

Revision eacc7f244 Featuring:

- Add Merged C-Scan view (only available in analysis) with 2D Encoded files for Conventional A-Scan:
 - 1. Merged C-Scan view (Zoom only in scan axis)
 - 2. Amplitude Top View / C-Scan will be drawn using peak as reference.
 - 3. Time of Flight (Depth) C-Scan are drawn using peak or flank as reference (user selectable).
 - 4. Options are available in view tab (when C-Scan view is selected), data can be filtered using reference gate (optional) and data gate. (G1/, G1^,...)
- · Add Export To CSV for Merged C-Scan, C-Scan and Top views (Ampl. and Depth)

Fixed:

- 1. (#2783) -Fix parameters "Palette Ampl. Low/High" not shown in TOFD view
- 2. (#2983) -Fixed incorrect ruler in merged views.
- 3. (#2957) Fix depth palette values were not converted to inches in c-scan palette ruler,
- 4. Fix software lockup when loading Utdata after Utcfg under some specific circumstances
- 5. Always show dB Ref measurement for gates, even when there's no DAC/DGS/TCG curve
- 6. Depth measurement correction millimeters/inches in CSV files
- 7. Correct 3D drawing of a probe inset
- 8. Encoder Stop now aligned to the last valid encoder position, considering distance and step.
- 9. Fix issue where the wedge menu items would not reload correctly.

Known issues:

- 1. Zoom not supported yet in A-Scan, S-Scan and L-Scan
- 2. Software gain does not affect depth top/end views (the IFT gate is triggered prior to apply the software gain)

Featuring:

• Improvements to "Save as CSV" (right click in C-Scan, C-Scan Merged and Top view select extract to CSV)

View/Type measures	Amplitude	Depth
C-Scan View	Yes	Yes
C-Merged View	Yes	Yes
TOP View	Yes	Yes
Top Merged View	No	No

- Ask to save session on close
- Measurement list can be re-ordered
- Moved replay frame rate setting to Preferences
- Add a C-Scan view type (available in acquisition and in analysis):
 - C-Scan are allowed with L-Scan type primary scan
 - C-Scan are created for dataset defined by gates
 - New options are available in View properties tab (when gate is selected), data can be filtered using reference gate and measurement gate. (none, Gi, G1/, G1^,...)
- Add Merged Top and Merged C-Scan view (only available in analysis) with 2D Encoded files
 - Merged TOP view (No Zoom)
 - Merged C-Scan view (No Zoom)
 - Amplitude Top View / C-Scan will be drawn using peak as reference.
 - TOF or Depth Top View / C-Scan will be drawn using peak or flank as reference (user selectable).
- · Enhanced menu structure (for harmonization with future products and better user efficiency)
 - Menus are simplified and user customizable with collapsible Menus
 - · Probe tab is simplified, optional features are in "advanced settings"
 - Add and remove probe/wedge is now achieved within probe tab (user can select the probe to delete).
 - Add and remove scan is now achieved within scan tab (user can select the scan to delete).
 - Many other refinements
- Palettes:
 - All palettes can be changed independently or as a group: depth palette, amplitude palette
 - Inverted palettes created
 - New color palettes: Cubic Law and Fire&Ice

Gates:

- The gate are drawn with a gate trigger indicator (flank or peak).
- Display gate position in S-scan or L-scan (onto extractor)
- Draw extractors on beam center
- · Add Freehand cursor info in reports

Fixed:

- (#2569) Skip measure or "True Depth Measurement" are wrong in inches
- (#2572) Creating report with setup Dual Crystal may crash software

Known issues:

- 1. Zoom not supported yet in A-Scan, S-Scan and L-Scan
- 2. Software gain does not affect depth top/end views (the IFT gate is triggered prior to apply the software gain)

2011-06-30 UTStudio Standard & Viewer 3.1.40 Release 1

Featuring:

- Add "Freehand" cursors to S/B/TOP/END-Views, measures on a plan the length of defect
- · Allow linking "frame extractor" across scans of a same utdata
- Recall "Acquisition Layout"
- Capability of saving and recalling layouts
- UTStudio can now "Export Data..." in CSV format
- Extend UTStudio license to 1 year (without internet connection)

· Various instability fixes

Known issues:

- "Measurement tab" and "Measurement view": Gate measurements are red when no peak is detected.
- Software gain does not affect depth top/end views (the IFT gate is triggered prior to apply the software gain)

2011-02-03 UTStudio3 Public Manifest Release 3.1.34 Release 1 UTStudio Standard & Viewer 3.1.34

- Viewer: r5396
- Standard: r5402

Featuring:

- Add Amplitude and Depth measurements in Top and End views with Cartesian Cursor
 - "Color Map Compression"
 - with mouse in color palette ruler
 - with "Palette Depth" or "Palette Amplitude" boundaries in view menu
- Add G1/ I/ measurement
- Support of 2D encoders (the view can only display on axis)
- In Analysis mode, cursors are linked as per "Sonatest Application group" requirements. Add a new type of extractor "Frame Extractor"
- Depth Rulers in A-Scan (as a view option, in view tab)
- Measure reference, user selectable
 - Measure Referenced to Part Datum or Wedge
 - Change the computation and representation of Ruler and Measures (gates, measurement bar)
- Report: Cursor reporting layout reviewed
- 3D Views integrated to report
- Customer custom logo in report (Inspection : Report options)
- · IFT gate can be moved in Analysis mode
- Save UTCFG from an existing UTDATA
- Save UTDATA once layout, cursors and gate have been modified
- Multiple Interface Triggering measurements improvements
- Multiple Interface Triggering fixes when using wizards
- Added TOFD Straightening feature, in "Properties/Analysis" tab
- Make the summary window available as a View in UTStudio
- Add new tips to the configuration summary
- Add special colors for No-data, No-trigger and Filtered-data in palette files
- Add "Unit Serial ID" in report

Fixed:

• TOFD and A-Scan are now linked by the "Frame Extractor" cursor

Known issues:

• "Measurement tab" and "Measurement view": Gate measurements are red when no peak are detected.

2010-11-10 UTStudio3 Public Manifest Release 3_1_32 Release UTStudio Standard & Viewer 3.1.32

• r4865 (Release)

Featuring:

- Licensed version (with 30 days evaluation)
- Add "Frame Extractor" cursor linked in all views
- Manual "link cursor" functionality using mouse
 - Cartesian with "angular extractor"
 - "Frame Extractor" with "angular extractor"
 - · Cartesian with cartesian
 - Box with gate
 - Hyperbolic with cartesian
- Zoom functionality extended with the zoom bar in views.
- Zoom function achievable with mouse wheel
- · Add "My UTStudio Files" directory to "My Document", containing examples and probe and wedge database
- UTDATA, UTCFG, UTSESSION file associations in windows file explorer
- · Reorganize menus, tab bars and toolbars for usability

- New palettes (same as RapidScan)
- Angular ruler added to view options
- · View properties tab: added "depth path mode" to enable Depth or Sound Path ruler
- IFT: Interface Gate added and Gate minus interface measurement added
- Added Layouts
- 3d View shows Near Field
- 4 Phased Array Scans capability

When Mono and Phased array are combined, maximum 3 scans
Mono (conventional only), maximum 3 scans
Phased array only, maximum 4 scans

- Skip cursor (part thickness) shown in A-Scan
- Changing material updates velocity
- Each sheet can have a maximum of 10 views.

Fixed:

- AWS Indication Rating (iRating) now calculated properly
- Repair arrow icons in measurement list
- Add report date to report
- Time based UTDATA can be analyzed (if file have been acquired with 3.1.31 and higher)

Known issues:

- · Gate measurements: dB is not working
- "Measurement tab" and "Measurement view": Gate measurements are red when no peak are detected.
- When loading heavy "utsession" file may encounter instability
- Link cursor in TOFD (between a-scan and tofd view) will be manual as a workaround in this version
- Change view orientation may not be sync zoom widget
- Measure view is not saved in "utsession".

2010-09-14 UTStudio3 Public Manifest Release 3.1.22 Beta2

UTStudio Standard & Viewer 3.1.22

• r4180 (beta)

Featuring:

- Capability to save session
- Extend trial version up to December 31st, 2010
- Added "view option tab"
- Added "cursor option tab"
- Allow to display palette to any view
- Added software gain
- Added ability to zoom encoded

Known issues:

- No "Viewer and Standard" version differentiation (workaround: license expire on October 1st 2010)
- The "Frame Cursor" does not show up in TOP/END/B Views
- Link between cursors are correct if origin from a predefined layout, if not link are not adequate
- 3D Views do not render in report
- Gate red indicator is inverted
- There is a possible crash of the software when creating complex layout (more than 8 views), it is a known issue.
- The near field implementation is under test (so do not rely on it for now).

2010-08-17 UTStudio3 Public Manifest Release 3.1.21 Beta

UTStudio Standard & Viewer 3.1.21 beta Featuring:

- Wall to Wall 16 bits architecture
- Part/Probe/Wedge/Part/Encoder view is a mimic of Veo R1
- Load G3 file for analysis (one file at a time)
- Gate Cursor and Mesurements is a mimic of Veo R1
- Weld Overlay is a mimic of Veo R1
- Report is a mimic of Veo R1 (not in viewer version, only lite)

- Multiple file opening
- Standard Version license security expire October 1st 2010
- Measurement View
- General User Interface Review
- Windows XP/Vista/7 32&64-Bit support
- Probe Menu/Wedge Database View and Edit= Veo R1
- New Cursor and View property pane
- (PARTIAL IMPLEMENTATION)Link Cursor
- (PARTIAL IMPLEMENTATION) Workspace / Layout management
- (POST PONED R3.1.4)Side Views
- (POST PONED R3.1.3) Zoom in encoded views
- (POST PONED R3.1.4) RPC Connection
- (POST PONED R3.1.4) Defect Table (See 9.2.1 of Old UTStudio Product Definition)
- (POST PONED R3.1.4) Soft gain
- (POST PONED R3.1.4) Indication Quantitative / Qualitative (Defect Table)
- (POST PONED R3.1.4) Wizard / Code management
- (POST PONED R3.1.4) 6 dB drop box analysis
- (POST PONED R3.1.4) TOFD: Straightening (Data flattening, hyperbolic cursors are irrelevant without)

Fixed:

- Fixed: Crash with Multi-file report
- Fixed: Cursor does not support mouse (workaround: select the view with the mouse, press "c" to select the appropriate cursor, use the arrows to move it.
- Rename D-Scan to B-Scan
- Fix Delete Cursor auto-refresh
- Remove % of Cartesian cursor
- Box size has a default possible position
- Box cannot be removed if extraction are present in layout
- ruler not properly refresh corrected
- · Box threshold now available in "Cursor property" pane
- cursor measure now part of report
- Now easier to drop down combo box
- All property moved to property pane

Known issues:

- No "Viewer and Standard" version differenciation (workaround: license expire on October 1st 2010)
- TOFD utdata file prior to file format 3.1.2 cannot be analysed
- Recommend the use of file format 3.1.2, before veo 3.1.2 release it is recommended to use "utdata" file provided in UTStudio working directory
- The "Frame Cursor" does not show up in TOP/END/B Views
- Link between cursors are correct if origin from a predefined layout, if not link are not adequate
- 3D Views do not render in report
- Gate red indicator is inverted