2014-08-14 UtStudio3 Public Manifest 3.7.1

UTStudio Pack 3.7.1

- Viewer: 3.7.1
- Standard: 3.7.1

Important Notice

UTStudio 3.7.1 can open files from:	UTStudio 3.7.1 can save .utcfg files compatible with:
• Veo (all versions) • Prisma (all versions)	• Prisma 3.7.1+ • Veo 3.7.X+ (unreleased at the time of writing)

Version Differentiation:

UTSTUDIO VERSIONS	VIEWER	STANDARD
Read and analyse UTDATA and UTCFG files	✓	✓
A/B/D/L/S-scan views	✓	✓
Top/Side/End/C-Scan projected views	✓	✓
View reports	✓	✓
TOFD views	✓	✓
Export acquisition data to a CSV format		✓
Create UTCFG files		✓
Produce reports		✓
Layout and workspace management		✓

Featuring

- 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

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
- *+ all fixes from 3.5.13 Beta*

Minimum System Requirements

System Processor:	600Mhz + Processor
System Memory:	2GB Ram Recommended
Free Disk Space:	200MB of Free Disk Space
Operating System:	Windows XP, Vista, Windows 7 or Windows 8 (32-Bits Version and 64 bits)

2014-06-03 UtStudio3 Public Manifest 3.5.13 Beta

UTStudio Pack 3.5.13 Beta

- Viewer: 3.5.13 Beta
- Standard: 3.5.13 Beta

Important Notice

This version is a pre-release (BETA) that addresses significant issues when using the interface trigger function in B-Scan and C-Scan. This upgrade is recommended only if you experience these issues.

Version Differentiation:

UTSTUDIO VERSIONS	VIEWER	STANDARD
Read and analyse UTDATA and UTCFG files	✓	✓
A/B/D/L/S-scan views	✓	✓
Top/Side/End/C-Scan projected views	✓	✓
View reports	✓	✓
TOFD views	✓	✓
Export acquisition data to a CSV format		✓
Create UTCFG files		✓
Produce reports		✓
Layout and workspace management		✓

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

Minimum System Requirements

System Processor:	600Mhz + Processor
System Memory:	2GB Ram Recommended
Free Disk Space:	200MB of Free Disk Space
Operating System:	Windows XP, Vista, Windows 7 or Windows 8 (32-Bits Version and 64 bits)

2014-02-10 UtStudio3 Public Manifest 3.5.9

UTStudio Pack 3.5.9R2

- Viewer: 3.5.9R2
- Standard: 3.5.9R2

Version Differentiation:

UTSTUDIO VERSIONS	VIEWER	STANDARD
Read and analyse UTDATA and UTCFG files	✓	✓
A/B/D/L/S-scan views	✓	✓
Top/Side/End/C-Scan projected views	✓	✓
View reports	✓	✓
TOFD views	✓	✓
Export acquisition data to a CSV format		✓
Create UTCFG files		✓
Produce reports		✓
Layout and workspace management		✓

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.

Minimum System Requirements

System Processor:	600Mhz + Processor
System Memory:	2GB Ram Recommended
Free Disk Space:	200MB of Free Disk Space
Operating System:	Windows XP, Vista, Windows 7 or Windows 8 (32-Bits Version and 64 bits)

2013-07-29 UtStudio3 Public Manifest 3.4.4

UTStudio Pack 3.4.4

- Viewer: 3.4.4
- Standard: 3.4.4

Version Differentiation:

UTSTUDIO VERSIONS	VIEWER	STANDARD
Read and analyse UTDATA and UTCFG files	✓	✓
A/B/D/L/S-scan views	✓	✓
Top/Side/End/C-Scan projected views	✓	✓
View reports	✓	✓
TOFD views	✓	✓
Export acquisition data to a CSV format		✓
Create UTCFG files		✓
Produce reports		✓
Layout and workspace management		✓

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 **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

- 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)

Minimum System Requirements

System Processor:	600Mhz + Processor
System Memory:	2GB Ram Recommended
Free Disk Space:	200MB of Free Disk Space
Operating System:	Windows XP, Vista, Windows 7 or Windows 8 (32 or 64 bits)

2013-04-26 UtStudio3 Public Manifest 3.4.3 Release 1

UTStudio Pack 3.4.3 Release 1

- Viewer: 3.4.3 Release 1
- Standard: 3.4.3 Release 1

Version Differentiation:

UTSTUDIO VERSIONS	VIEWER	STANDARD
Read and analyse UTDATA and UTCFG files	✓	✓
A/B/D/L/S-scan views	✓	✓
Top/Side/End/C-Scan projected views	✓	✓
View reports	✓	✓
TOFD views	✓	✓
Export acquisition data to a CSV format		✓
Create UTCFG files		✓
Produce reports		✓
Layout and workspace management		✓

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 **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

- 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)

Minimum System Requirements

System Processor:	600Mhz + Processor
System Memory:	2GB Ram Recommended
Free Disk Space:	40MB of Free Disk Space
Operating System:	Windows XP, Vista, Windows 7 or Windows 8 (32 or 64 bits)

2013-02-22 UtStudio3 Public Manifest Release 3.3.4 Release 1

UTStudio Pack 3.3.4 Release 1

- Viewer: 3.2.5 Release 3
- Standard: 3.2.5 Release 3

Version Differentiation:

UTSTUDIO VERSIONS	VIEWER	STANDARD
Read and analyse UTDATA and UTCFG files	✓	✓
A/B/D/L/S-scan views	✓	✓
Top/Side/End/C-Scan projected views	✓	✓
View reports	✓	✓
TOFD views	✓	✓
Export acquisition data to a CSV format		✓
Create UTCFG files		✓
Produce reports		✓
Layout and workspace management		✓

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)

Minimum System Requirements

System Processor:	600Mhz + Processor
System Memory:	2GB Ram Recommended
Free Disk Space:	40MB of Free Disk Space
Operating System:	Windows XP, Vista, Windows 7 or Windows 8 (32-Bit Version and 64 bit)

2012-11-15 UtStudio3 Public Manifest Release 3.2.5 Release 3

UTStudio Pack 3.2.5 Release 3

- Viewer: 3.2.5 Release 3
- Standard: 3.2.5 Release 3

Version Differentiation:

UTSTUDIO VERSIONS	VIEWER	STANDARD
Read and analyse UTDATA and UTCFG files	✓	✓
A/B/D/L/S-scan views	✓	✓
Top/Side/End/C-Scan projected views	✓	✓
View reports	✓	✓
TOFD views	✓	✓
Export acquisition data to a CSV format		✓
Create UTCFG files		✓
Produce reports		✓
Layout and workspace management		✓

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:

<u>Release 3</u>

1.   Support of new file format created VEO 3.2.5 R3

<u>Release 2</u>

2.   (#3513) - UTStudio: Report is incorrectly drawn when view is maximized
3.   UTStudio: B-Scan had wrong orientation by default

<u>Release 1</u>

4.   (#3367) - Fix Unexpected missed frames
5.   (#3311) - 3D view: size of part is proportional to scan area
6.   (#2972) - TOFD BW Ruler calibration enhanced
7.   (#2524) - 3D views part in the Report are not well displayed
8.   (#1933) - 3D Views tag's Title are not updated when we change Display Mode in Properties
9.   (#3368) - Unexpected beam exit point outside wedge error while using a 64 elements probe.
10. (#3226) - Rename "Rectangular Box" & "Square Box" to "Extraction Box"
11. (#3049) - Mono, Config issue when changing Dual Crystal to Mono Crystal.
12. (#3045) - CSV in amplitude, bad header
13. (#2686) - Wizard DAC, Nb Sub-levels not keep if return in DAC wizard
14. (#2958) - Fix some measures not refreshed when changing unit system.
15. (#2678) - Wedge type = None, Hide Identifiers and Setting categorize menu
16. (#3154) - Enhance error message labels for understandability
17. (#1624) - The measurement for each cursor are customized on a cursor type bases
18. (#3050) - S-Scan, Stop angle cannot have less than 70deg in specific scenario
19. (#2842) - Add Cartesian Cursor in Merged views init pos. at the top left corner of the views. (specific file)
20. (#2957) - Palette color scaling is not correct in C-scan Depth mode in Imperial.
21. (#2783) - Missing Ampl. Low and Ampl. High parameters in View tab for TOFD type scan
22. (#3140) add software gain in report
23. (#3196) "C1-E1 Dist Scan" measure marked as Invalid in utstudio
24. Increase maximum zoom level in encoded views
25. 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)

Minimum System Requirements

System Processor:	600Mhz + Processor
System Memory:	2GB Ram Recommended
Free Disk Space:	40MB of Free Disk Space
Operating System:	Windows XP, Vista, Windows 7 or Windows 8 (32-Bit Version and 64 bit)

2012-01-16 UtStudio3 Public Manifest Release 3.2.1 Release 1

UTStudio Pack 3.2.1 Release 1

- Viewer: 3.2.1 Release 1
- Standard: 3.2.1 Release 1

Version Differentiation:

UTSTUDIO VERSIONS	VIEWER	STANDARD
Read and analyse UTDATA and UTCFG files	✓	✓
A/B/D/L/S-scan views	✓	✓
Top/Side/End/C-Scan projected views	✓	✓
View reports	✓	✓
TOFD views	✓	✓
Export acquisition data to a CSV format		✓
Create UTCFG files		✓
Produce reports		✓
Layout and workspace management		✓

Featuring:

- Add Merged C-Scan view (only available in analysis) with 2D Encoded files for <u>Conventional A-Scan:</u>
  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:
3. Zoom not supported yet in A-Scan, S-Scan and L-Scan
4. Software gain does not affect depth top/end views (the IFT gate is triggered prior to apply the software gain)

2011-10-12 UtStudio3 Public Manifest Release 3.2.0 Release 3

UTStudio Pack 3.2.0 Release 1

- Viewer: 3.2.0 Release 1
- Standard: 3.2.0 Release 1

Version Differentiation:

UTSTUDIO VERSIONS	VIEWER	STANDARD
Read and analyse UTDATA and UTCFG files	✓	✓
A/B/D/L/S-scan views	✓	✓
Top/Side/End/C-Scan projected views	✓	✓
View reports	✓	✓
TOFD views	✓	✓
Export acquisition data to a CSV format		✓
Create UTCFG files		✓
Produce reports		✓
Layout and workspace management		✓

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):
    o C-Scan are allowed with L-Scan type primary scan
    o C-Scan are created for dataset defined by gates
    o 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
    o Merged TOP view (No Zoom)
    o Merged C-Scan view (No Zoom)
    o Amplitude Top View / C-Scan will be drawn using peak as reference.
    o 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)
    o Menus are simplified and user customizable with collapsible Menus
    o Probe tab is simplified, optional features are in "advanced settings"
    o Add and remove probe/wedge is now achieved within probe tab (user can select the probe to delete).
    o Add and remove scan is now achieved within scan tab (user can select the scan to delete).

- o   Many other refinements
- Palettes:
  - o   All palettes can be changed independently or as a group: depth palette, amplitude palette
  - o   Inverted palettes created
  - o   New color palettes: Cubic Law and Fire&Ice

- Gates:
  - o   The gate are drawn with a gate trigger indicator (flank or peak).
  - o   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:
5. Zoom not supported yet in A-Scan, S-Scan and L-Scan
6. Software gain does not affect depth top/end views (the IFT gate is triggered prior to apply the software gain)

2011-06-30 UtStudio3 Public Manifest Release 3.1.40 Release 1

Pack 3.1.40

- Viewer: 3.1.40 Release 1

- Standard: 3.1.40 Release 1

Version Differentiation:

UTSTUDIO VERSIONS	VIEWER	STANDARD
Read and analyse UTDATA and UTCFG files	✓	✓
A/B/D/L/S-scan views	✓	✓
Top/Side/End/C-Scan projected views	✓	✓
View reports	✓	✓
TOFD views	✓	✓
Export acquisition data to a CSV format		✓
Create UTCFG files		✓
Produce reports		✓
Layout and workspace management		✓

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)

Fixed:

- Various instability

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

Pack 3.1.34

- Viewer: r5396
- Standard: r5402

Version Differentiation:

UTSTUDIO VERSIONS	VIEWER	STANDARD
Read and analyse UTDATA and UTCFG files	✓	✓
A/B/D/L/S-scan views	✓	✓
Top/Side/End projected views	✓	✓
View reports	✓	✓
Create UTCFG files		✓
Produce report		✓
Layout and workspace management		✓

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

Pack 3.1.32

- r4865 (Release)

Featuring:

UTSTUDIO VERSIONS	VIEWER	STANDARD
Read and analyse UTDATA and UTCFG files	✓	✓
A/B/D/L/S-scan views	✓	✓
Top/Side/End projected views	✓	✓
View reports	✓	✓
Create UTCFG files		✓
Produce report		✓
Layout and workspace management		✓

- 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**

Pack 3.1.22

- r4180 (beta)

Featuring:

UTSTUDIO VERSIONS	VIEWER	STANDARD
Read and analyse UTDATA and UTCFG files	✓	✓
A/B/D/L/S-scan views	✓	✓
Top/Side/End projected views	✓	✓
View reports	✓	✓
Create UTCFG files		✓
Produce report		✓
Layout and workspace management		✓

- 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

Fixed:

- TBD

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

Pack 3.1.21b

- G3 TRUNK Software: 3.1.21 (beta)

Featuring:

UTSTUDIO VERSIONS	VIEWER	STANDARD
Read and analyse UTDATA and UTCFG files	✓	✓
A/B/D/L/S-scan views	✓	✓
Top/Side/End projected views	✓	✓
View reports	✓	✓
Create UTCFG files		✓
Produce report		✓
Layout and workspace management		✓

- 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 "Viewr 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