





### 2014-06-03 UtStudio3 Public Manifest 3.5.13 Beta

# UTStudio Pack 3.5.13 Beta

Viewer: 3.5.13 BetaStandard: 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	✓	1
Top/Side/End/C-Scan projected views	✓	1
View reports	✓	✓
TOFD views	✓	✓
Export acquisition data to a CSV format		✓
Create UTCFG files		✓
Produce reports		1
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: 3.5.9R2Standard: 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	✓	1
View reports	✓	✓
TOFD views	✓	✓
Export acquisition data to a CSV format		✓
Create UTCFG files		✓
Produce reports		✓
Layout and workspace management		1

# **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: 3.4.4Standard: 3.4.4

#### **Version Differentiation:**

UTSTUDIO VERSIONS	VIEWER	STANDARD
Read and analyse UTDATA and UTCFG files	✓	1
A/B/D/L/S-scan views	✓	1
Top/Side/End/C-Scan projected views	✓	1
View reports	✓	1
TOFD views	✓	1
Export acquisition data to a CSV format		1
Create UTCFG files		✓
Produce reports		<b>√</b>
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 1Standard: 3.4.3 Release 1

#### **Version Differentiation:**

UTSTUDIO VERSIONS	VIEWER	STANDARD
Read and analyse UTDATA and UTCFG files	✓	1
A/B/D/L/S-scan views	✓	1
Top/Side/End/C-Scan projected views	✓	1
View reports	✓	1
TOFD views	✓	1
Export acquisition data to a CSV format		1
Create UTCFG files		✓
Produce reports		1
Layout and workspace management		1

# **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 3Standard: 3.2.5 Release 3

#### **Version Differentiation:**

UTSTUDIO VERSIONS	VIEWER	STANDARD
Read and analyse UTDATA and UTCFG files	✓	1
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		<b>√</b>

# **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 3Standard: 3.2.5 Release 3

# **Version Differentiation:**

UTSTUDIO VERSIONS	VIEWER	STANDARD
Read and analyse UTDATA and UTCFG files	✓	1
A/B/D/L/S-scan views	✓	✓
Top/Side/End/C-Scan projected views	✓	1
View reports	✓	1
TOFD views	✓	1
Export acquisition data to a CSV format		1
Create UTCFG files		✓
Produce reports		1
Layout and workspace management		1

#### 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:

#### Release 3

1. Support of new file format created VEO 3.2.5 R3

#### Release 2

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

#### Release 1

- 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 1Standard: 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	✓	1
View reports	✓	✓
TOFD views	✓	✓
Export acquisition data to a CSV format		✓
Create UTCFG files		✓
Produce reports		✓
Layout and workspace management		1

# 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:**

- 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 1Standard: 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		1
Produce reports		1
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
  - 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
  - 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	✓	1
A/B/D/L/S-scan views	✓	1
Top/Side/End/C-Scan projected views	✓	✓
View reports	✓	✓
TOFD views	✓	✓
Export acquisition data to a CSV format		✓
Create UTCFG files		✓
Produce reports		1
Layout and workspace management		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)

# 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: r5396Standard: r5402

#### **Version Differentiation:**

UTSTUDIO VERSIONS	VIEWER	STANDARD
Read and analyse UTDATA and UTCFG files	✓	1
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	✓	1
A/B/D/L/S-scan views	✓	1
Top/Side/End projected views	✓	1
View reports	✓	1
Create UTCFG files		1
Produce report		1
Layout and workspace management		1

- 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		1
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	✓	1
View reports	✓	/
Create UTCFG files		1
Produce report		1
Layout and workspace management		<b>✓</b>

- 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