

Software Press Releases

TracePro Bridge 7.1.2 highlights

(Released on January 23rd 2012)

- Update: More CHS and CHT translations
- Update: Improve spline representation of conics and aspheres to improve faceting of these surfaces
- Update: Added some message translations for CHS and CHT
- Update: Fix typo in message regarding Importance Targets
- Update: Fix documentation of edit:move in Macro Reference
- Update: Improved formatting of Remaining and Elapsed time in progress dialog
- Update: Fix crash associated with using the Translate Object button
- Update: Improve raytrace performance and responsiveness of progress dialog box. This may be significant for many rays that are traced quickly.
- Update: Fix Apply Property for large text sizes
- Update: Fix for cursor when finished orbiting or panning
- Update: Fix incorrect labels on Polar Candela Distribution Plot
- Update: Fix error reading CodeV GLA command in CodeV Translator
- Update: Fix repeated memory consumption during successive raytraces with RepTile Texture file
- Update: Fix copy/paste issue
- Update: Fix incorrect error message and abort of RepTile property when Boundary Up Vector is parallel to surface normal
- Update: Fix bad link in help for Apply Properties: Fluorescence
- **TracePro Utilities Revisions...**
 - ▶ BSGDF Converter:
 - Update: Fix the issue that cannot drag the red block (control points of ABg curve) to value less than 1e-6
 - ▶ Surface Source Property Generator:
 - New: Add the capability of input and modify control points in the data grid
 - New: Add the option of using Spline or Linear interpolation for fitting curve
 - ▶ Texture Optimizer:
 - New: Add new capability of input condition for filtering the exported dot pattern
 - New: Add capability of selecting a region of cells in the contour plot mode
 - Update: Fix the issue of updating progress when generating and drawing dot pattern
 - Update: Correct the moving direction when mouse dragging in the trend chart
 - Update: Fix the issue of UI frozen when performing MD smooth
 - Update: Improve the performance of selecting cells in DataGrid View with huge number of cells
 - Update: Improve the performance of generating dot pattern for a big number of cells
 - Update: Fix the crash issue when aborting optimization if there is not any complete simulation yet
 - ▶ Interactive Optimizer:

- New: Add descriptions about the segment types in the online help
- New: Add description about how to calculate the error value in the online help
- New: Add new segment type : Asphere
- New: Add description about the command "Applyproperty" in the command reference
- Update: Fix the issue that the exported object does not match the Conic constant and Curvature values specified in the Property Editor
- Update: Fix the issue that Conic constant and Curvature values have changed after saving and reopening the .sod file
- Update: Fix the issue of program hangs when the start value of absolute variable is outside allowable range

TracePro Bridge 7.1.1 highlights

(Released on December 16th 2011)

- Update: Fix case where Surface sources were lost because of large entity pointers
- Update: Improve color fidelity for True Color plots
- Update: Minor change to license log file
- Update: Surface sources were lost when importing models from the Bridge when the ACIS entity pointer is greater than the size of a long
- Update: Fix bug when faces are selected in component parts of SolidWorks when the assembly that references them is saved to an OML file.
- Update: Fix crash when selecting items with entity pointers larger than 2GB
- Update: Fix for source files larger than 2GB
- Update: Check for invalid importance sampling
- Update: Fix dropdown list for importance targets which could potentially get a bad value in it
- Update: Fix hang when changing to rotationally symmetric candela plot
- Update: Improve performance when reading source files
- Update: Fix crash when starting a grid ray inside an object with a GRIN material applied
- Update: Change radiometric units to analysis units
- Update: Peak value of Photopic Efficacy curve is 683 lumen/Watt
- Update: Fix the issue of recording wrong argument for command (raytrace:set-surface-source-discrete-wavelength)
- Update: Fix accuracy issues with intersections on toroidal surfaces
- Update: Fix updated path sort table
- Update: Cursor color fix
- Update: Update macro reference documentation for Ports and Files
- Update: Expose path sorting for LC
- Update: Raytrace improvements on spline surfaces
- Update: Change default on path sorting to off
- Update: Fix path sort problem
- Update: Fix incorrect percentage of total for multiple wavelengths
- Update: Fix a crash on an internally identified case
- Update: Recover surface source after an undo/redo
- Fix the issue of missing argument for defining the Rays/pixel value if the radiance quality is set to Custom in the scheme command (analysis:set-radiance-quality)
- Update: Fix raytrace issue on submitted model when the number of rings was increased to 200
- Update: Better window titles on Selected Rays dialog box and disable button if not applicable
- Update: Fix incorrect local coordinates when using surface source with emissivity = surface property absorptance and property is applied with anisotropic axis = surface normal
- Update: Fix incorrect azimuth interpolation of anisotropic surface property when there is no azimuth = 0 entry in the property
- Update: Fix incorrect overlapping body message during birefringent raytracing
- Update: Ignore Simulation mode settings for Luminance raytrace
- **TracePro Utilities Revisions...**
 - ▶ Bitmap Source:

- Update: Allow user to edit weights as well as wavelengths.
- Update: Update to use CIE wavelengths and weights for RGB by default.
- Update: Warn user when he attempts to open a non-image file or unsupported file type.
- ▶ BSRDF Converter:
 - New: Add the capability of displaying ABg modeled curve in the profile editor
 - Update: Fix the issue of not accepting a value of less than 1e-6 for BRDF A coefficient
 - Update: Fix issue opening scatter files when language setting uses “,” as the decimal separator
 - Update: Fix the issue of loading Scattermaster file when the Language setting is French
- ▶ IES/LDT Import:
 - Update: Fix the possible exception in drawing when the loaded IES contains too large number of data.
- ▶ Texture Optimizer:
 - New: Improve the speed of generating dots and MD smooth by using multithreading techniques
 - New: Add new option to export texture property
 - Update: Implement the progress update in the Texture Window when drawing and exporting texture map
 - Update: Correct the moving direction of view port when mouse dragging in the trend chart
- ▶ Interactive Optimizer:
 - New: Add capabilities of import/export uniformity operands
 - New: Add feature of exporting object’s profile to a text file and update the on-line help
 - New: Add new segment type : Asphere
 - New: Add new after-scheme command for creating asymmetric aspheric surface
 - New: Add new capability that the baseline of the Fresnelized surface can be aspheric
 - Update: Fix the crash when optimizing if there is CIE_xy or CIE_uv’ target as operand and Window decimal separator is set to “,”
 - Update: Fix the issue of missing axis label after rotating object when Window decimal separator
 - Update: Fix the issue of failure in exporting model after right-click in Optimization log when Window decimal Separator is set to “,” is set to “,”
 - Update: Fix the issue of Candela options set by Interactive Optimizer, now the switch of smoothing and number of points in Candela distribution plot is defined in TracePro by users
 - Update: Fix the issue when the optimization results are sorted on the “Err” column, the incorrect plot will be shown once a result is selected
 - Update: Turn the simulation mode prompt off when optimizing
 - Update: Fix issue of calculating the error value of irradiance profile at single raytrace mode
 - Update: Fix issue of switching the variable scope for the user-defined variables in the optimization dialog



TracePro Bridge 7.1.1 highlights

(Released on December 16th 2011)

- Update: Fixed bug that produced an error message dialog when saving an oml file from a SolidWorks assembly or created a partial oml file. This would occur when a component was open in a separate SolidWorks document window and had faces selected in it.

TracePro 7.1.0 new features/enhancements

(Released on November 2nd 2011)

- Enhanced Path Sorting, including availability for Analysis Mode ray traces.
 - The Display Selected Paths feature enables you to visualize the rays for selected paths in the Model Window.
 - The Irradiance Map will also show results for only the selected paths.
- Enhanced 3D Irradiance/Illuminance Maps, including display in the Model Window and additional Options.
- Enhanced Ray Sorting, with several new choices in the Sort Type entry.
- Other Changes
 - Location of ray-trace temporary files
 - Limiting the number of threads in TracePro

TracePro 7.0.7 highlights

(Released on September 9th 2011)

- New: Add Scheme command: (view:get-data-directory)
- Update: Fix progress formatting when tracing pixels in 32-bit version
- Update: Fix issue with opening source file
- Update: Disable certain cells in the Surface Source Property Editor based on type
- Update: Fix incorrect Total Flux on smoothed irradiance map on curved surface
- Update: Remove Cancel button from Select Edition dialog
- Update: Update: Allow unicode model path
- Update: Evaluate vectors for being on the correct side of an interface inside materials with very large birefringence. This could lead to incorrect overlapping body messages.
- Update: Require Select by Area tool to have selection at least 3 pixels apart
- Update: Update: Fix issue with sorted combo box
- Update: Fix issue with BSDF interpolation
- Update: Fix plot crash when property name is ""
- Update: Fix incorrect raytrace after performing Prescription Set Data after initial raytrace
- Update: Fix calculation for skipping rays in Ray Sorting
- Update: Fix incorrect Ray Sorting display for Reverse Raytrace and Selected Surface
- Update: Added internal code check for validation
- Update: Refresh model tree node properly
- Update: Bulk Scatter DLLs can use the Win32 name with "_x64" appended. This is the same convention as Surface Property DLLs and eliminates the need for two separate properties.
- Update: Fix crash in bulk scatter DLL found in internal testing
- Update: Fix Modify Lens Element when it deletes lens when specifying a cylinder with radius = 0
- Update: Additional cht and chs translations
- Update: Performance improvements while raytracing splines
- Update: Fix crash during Auto Importance Sampling when bad data is input
- Update: Disable update raysort button when the view is not applicable
- Update: Fix issue with circular boundaries not working with Textured RepTile
- Update: Fix incorrect average irradiance/illuminance value in Irradiance Viewer
- Update: Fix conservation of energy error message on re-importing exported geometry
- **TracePro Utilities Revisions...**
 - ▶ General:
 - Update: Version numbers in Help/About are the same across all Utilities
 - ▶ BSDF Converter:
 - Update: Clean up the title and help
 - ▶ Fluorescence Property Generator:
 - Update: Fix an issue related to the user-defined equation
 - ▶ IES/LDT Import:
 - Update: Change the default value of the emission unit to "Photometric Flux (lumen)"
 - ▶ Texture Optimizer:

- Update: Change the flux unit from "W" to "W/lm" in the Target map window
- ▶ Interactive Optimizer:
 - Update: Fix the issue when applying surface name to object will sometimes fail.
 - Update: Fix the issue when exporting model to TracePro, there is error indicating "Object reference not set to an instance of an object"
 - Update: Fix the issue that getting wrong value by using var() command.
 - Update: Fix the bug that optimization fails with "property-apply-surface"

TracePro Bridge 7.0.7 highlights

(Released on September 9th 2011)

- Update: Fixed bug with the display of an assertion failed error dialog when opening a part that was imported into Solidworks and had surface bodies that were suppressed. Picking retry from the dialog allowed the user to work with the part. However, if this part was inserted into an assembly the same error message would be displayed and after picking retry the assemblies system tree contained the suppressed surface bodies

TracePro 7.0.4 highlights

(Released on March 31st 2011)

- Update: Fix raytrace errors on submitted model
- Update: Make round numbers and consistent scale on volume flux viewer plots
- Update: Fix loading legacy file with incorrect Rep Tile Boundary Up Vector
- Update: Fix initialization issue found with user-supplied model
- Update: Improve performance and reduce memory consumption with large texture files on machines with many cores
- Update: Fix incorrect results or crash for surface temperature distribution with nx1 table
- Update: Update help for IES/LDT importer
- Update: Utility menu item changed from "IES Import" to "IES/LDT Import" to reflect new functionality
- Update: Fix scheme macros that output analysis results so they output the desired ANSI or UNICODE format
- Update: Fixes for 3D irradiance maps
- Update: Fix incorrect import of a Code V file which contains a lens with a zero center thickness
- Update: Perform automatic search for a network license
- Update: Fix crash when ray exits edge of Rep Tile cell with a birefringent material property applied
- Update: Bulk scatter now works with Constant Rep Tile and Variable Row Rep Tile
- Update: Fix units problem in foreign language versions of the user interface
- Update: Consolidate raytrace messaging to avoid tangled messages from multiple threads
- Update: Fix flux normalization for Solar angle type when Uniform Angle/Weighted Flux is chosen
- Update: Fix issue with refreshing the model view
- Update: Ensure tmp files from a previously interrupted run are deleted
- Update: Fix incorrect error message when using (raytrace:add-file-source) and source file is not found
- Update: Fix incorrect irradiance map from a sim file for planar faces
- Update: Fix problem of incorrect flux values for Irradiance Surface Source Property with Discrete Wavelengths in Surface Source Editor if the Editor is opened before an Audit is done
- Update: Fix incorrect flux values for Calculated Wavelengths with Surface source Properties and other issues with Surface Source Property flux values
- Update: Improve precision in Measure dialog
- Update: Fix aspheric intersector issue on submitted model with large aspheric coefficients on high order terms
- Update: Fix ray intersection issue due to numerical roundoff
- Update: Fix ray leaks on facet edges with faceted spline raytracing
- Update: Fix incorrect refraction directions for transmitted grating orders on submitted model
- Update: Check for reserved character in group name
- Update: Update: Update scheme command (raytrace:set-wavelengths) so that it does not apply wavelengths to file sources with wavelengths in the file, and never applies flux and weight values to file sources Update Macro Reference to reflect these changes.
- Update: Update all analysis functions to correctly handle the rare case of split faces
- Update: Improvements to fluorescence calculations
- Update: Fix an issue dealing with trial licenses

- Update: Substantially reduce number of rays terminated due to edge intersections
- Update: Fix issue when using coating DLLs on a coincident
- Update: Fix crash in irradiance map with incident rays in Italian and Spanish versions
- Update: Improvements to raytrace performance
- Update: Fix to macro command: (edit:rotate-file-source) to properly locate file source at correct center position
- Update: Fix issue with Irradiance map bounds checking on submitted model
- Update: Improvements to memory exception handling
- Update: Only perform user interface checks on active options with regards to Candela distributions
- Update: Reduce memory consumption on certain highly faceted faces
- Update: Remove races and reseeding issues associated with Coating DLLs and their use of the random number generator
- Update: Ensure audit is redone properly after healing
- Update: Low-level performance improvement to ray intersector
- Update: Fix to saving True Color irradiance map as a text file; the correct RGB values are now saved
- Update: Fix rare raytrace errors on certain spline intersections at grazing incidence
- Update: Incorporate raytrace performance improvements on spline intersections
- Update: Fix reported flux on Display Selected Rays dialog for irradiance map
- Update: On the Analysis menu, only enable "Select Rays..." when "Display Selected Rays" is checked
- Update: Changes to licensing log file format
- **TracePro Utilities Revisions...**
 - ▶ General:
 - Update: Improve the rainbow color shown for the contour map and 3D plot
 - Update: Launch TracePro list will display all installed TracePro(s) including x86 and x64 versions
 - Update: Fix the double precision issue when using D3D library
 - ▶ BSDF Converter:
 - New: Display the projected intensity map on the angular selector window
 - New: Add capability to export BTDF data
 - Update: Improved stability and performance
 - Update: Fix the hang when importing Alanod files
 - Update: Fix the European decimal separator issue
 - Update: Changes BSDF integral to TracePro algorithm to reduce the differences between BSDF Converter and TracePro
 - Fluorescence Property Generator:
 - Update: Fix the European decimal separator issue
 - Update: Add filename extensions when saving files
 - ▶ IES/LDT Import:
 - New: Add the capability in importing Eulumdat file
 - Update: Fix the European decimal separator issue
 - ▶ Surface Source Property Generator:
 - New: Add the capability of pasting a image file into the profile editor
 - Update: Fix the European decimal separator issue
 - Update: Fix the issue that Surface Source Property Generator will crash at launch on some computers

▶ Interactive Optimizer:

- New: Add new optimization operand – Uniformity
- New: Add data grid view in the Candela profile and Irradiance profile editors
- New: Increase variable types “Absolute variable” (new) and “Relative variable” (old)
- New: Add the capability that the bitmap layer can be modified in the Property window
- New: The variable indicator will be highlighted if its corresponding control point is selected
- New: Add the capability that dragging and dropping the sod or olg file into the application window, the dropped file will be loaded automatically
- New: Add new capability of selecting “Exiting” and “Incident” type for the Candela profile operand in the optimization window
- New: Add an option in the Option window to save the Candela file in Polar or Rectangular type
- New: Add an option in the Option window to define the sampling number for spline curve generation in TracePro
- Update: Fix the crash when analyzing the Candela files saved by different language version of TracePro
- Update: Fix crash attempting to optimize model with Spanish, Italian or Japanese version
- Update: Moves the temp file folder to c:\temp to prevent the file access problem when user name includes Japanese characters
- Update: Add a pre-check for variable setting before starting optimization
- Update: Fix the European decimal separator issue
- Update: Fix the issue when the loaded sod file contains the missing property in current TracePro database
- Update: Add a pre-check for the operands setting before starting optimization
- Update: Make the toolbox window remains “on top of” the optimization window
- Update: Fix the wrong scheme command for the after-scheme command “loadmodel”

TracePro Bridge 7.0.4 highlights

(Released on March 31st 2011)

- Update: Improve tolerance on the license check for tampering with the clock because Windows time synchronization is not precise
- Update: The TracePro Bridge License Information dialog has been updated to search for the server name if the user leaves the Server host name field empty or enters a single space character
- Update: Prevent SolidWorks crash if the bridge encounters an access violation or other structured exception. A message box is now displayed indicating where the exception was handled
- Update: Fix SolidWorks crash when right clicking on an item in the System Tree or selecting in the SolidWorks feature manager tree. This would occur after collapsing an object in the System Tree while a surface was selected in the branch that was collapsed
- Update: TracePro properties are now copied from the prior active configuration when a new configuration is created for a part or an assembly
- Update: The option "Apply property to all configurations" is now checked for any properties that are copied when inserting a component into an assembly
- Update: Fix error message displayed after adding weight for wavelength of 1.457E-010
- Update: Fix error that occurred whenever an assembly component pattern was inserted or modified

TracePro 7.0.3 highlights

(Released on January 12th 2011)

- Update: Fix issued related to saving and reading source files
- Update: Remove installer conflict with other services running on ports 6001 and 6002
- Update: Fix errant flux report on submitted model
- Update: Fix bad raytrace results on submitted model
- Update: Update help: source file format to indicate values that are not used
- Update: Allow more facets for Faceted Splines raytracing and 3D Irradiance Map
- Update: Add macro command: (raytrace: get-surface-source-total-rays)
- Update: Replace the multi-threaded random number generator with one with a much longer period
- Update: Fix bug with specifying lens apertures
- **TracePro Utilities Revisions...**
 - ▶ General:
 - Update: Fix CRI calculation bug
 - ▶ Interactive Optimizer:
 - New: Add online help
 - New: Add new features to create ray fans and ray sequence
 - New: Add the capability of settling assymmetric candela target
 - ▶ Interactive Optimizer:
 - New: Support new CASI file format: [angle(deg), polar angle, BSDF
 - Update: Fix the bug while exporting property file of Asymmetric BSDF table type

TracePro 7.0.2 highlights

(Released on December 9th 2010)

- Update: Improve random ray generation from surface sources
- Update: Allow ten minute time tolerance on licensing from multiple networked computers
- Update: Do not display importance sampling warning messages for luminance auto importance targets
- Update: Irradiance maps are now calculated over the projection of the actual surface instead of the projected plane of the map
- Update: Sim files now store normal vector information-the user is notified if an older sim file is opened
- Update: Fix to XML reader when the grid sources are saved with "Flux per ray" designation
- Update: Rays erroneously hitting surface outside face on submitted model have been fixed
- Update: Performance improvements to exit surface faceting
- Update: Ensure thread safety when processing geometric exception
- Update: Increase multi-threaded loop iteration count to reduce latency during raytracing
- Update: Fix incorrect warning message when tracing GRIN material
- Update: Fix to body selection problem for 3D irradiance map
- Update: Fix numerical instability in birefringent TIR case when the reflected extraordinary wave is also evanescent
- Update: Fix calculation of transmitted flux in fluorescence raytracing
- Update: Fix incorrect calculation of source flux when using surface source property and calculated wavelengths
- Update: Automatic calculation of irradiance map up vector prefer -y direction
- Update: Fix irradiance map problems for circular planes
- Update: Update time remaining every second with the best estimate at that point in time
- Update: Fix incorrect display of Display Selected Rays for irradiance map on certain models
- Update: Fix undisplay object problem
- **TracePro Utilities Revisions...**
 - ▶ BSRDF Converter:
 - New: Support new CASI file format: [angle (deg), polar angle, BSRDF]
 - Update: Fix the bug while exporting property file of assymmetric BSRDF table type
 - ▶ Interactive Optimizer:
 - New: New Function: Generate Rays fan and Ray sequence
 - Update: Fix the bug while applying face's name and property, some faces will be ignored

TracePro 7.0.1 highlights

(Released on November 30th 2010)

- Update: Update estimated time to completion more frequently for very large ray sets
- Update: Improvements to performance and memory consumption on several user-supplied models
- Update: If a source file is not in the absolute location specified in the OML file, check to see if it is in the same folder as the OML file and inform the user that this file will be used instead. If it is not there, prompt the user to search for it.
- Update: Fix elapsed time in raytrace report for run times ranging from 1-2 hours and 1-2 days
- Update: Provide warning messages for improper importance sampling
- Update: Add newline to out-of-memory error message
- Update: Fix cases where the wait dialog remains displayed after a lengthy operation is complete
- Update: Update highlight mode due to HOOPS 17 change
- Update: Fix invalid estimate for remaining time that is caused by a divide by zero. It is not possible to estimate the time prior to the first step.
- Update: Enlarge text control to allow two full lines of output in the progress dialog
- Update: Remove duplicate macro recording when deleting sources
- Update: Pay attention to the voxelization type setting for accelerated raytrace option
- Update: Fix issue with fluorescence tracing in simulation mode
- Update: Fix issue with opening volume flux files
- Update: Fix crash after canceling a raytrace with a surface source in it – worker threads would be left running
- Update: Prevent crash during raytrace of RepTileTexture on submitted model
- Update: Fix Irradiance Map boundary line
- Update: Add support for large multi-threaded files – removes 2GB limit on file sizes
- Update: Put up wait dialog during lengthy file:open operations
- Update: Post error message if there are file handle issues with multi-threaded files
- **TracePro Utilities Revisions...**
 - ▶ General:
 - Update: Fix string overlapping issue on some charts
 - Update: Fix the D3D resize issue
 - ▶ BSDF Converter:
 - New: Add a preference dialog
 - New: Interpreter can now read Scattermaster files
 - Update: Fix issue with incorrect exclusion angle calculation for Scattermaster files
 - Update: Fix issue with exporting files and modify the export dialog
 - Update: Fix issue with signature file
 - Update: Fix issue with launching TracePro
 - Update: Fix issue associated with incident data selector
 - Update: UI modifications to the menu bar on the main window, the resize scale button, and the legend in the plot chart
 - ▶ Surface Source Property Generator:

- Update: Fix issue with wrong angular type when using Save&Export to generate the property file
- Update: Fix issue with exporting the spectral data to TracePro
- ▶ Interactive Optimizer:
 - New: Add the feature of applying surface property and names to each facet when segment is Fresnel or Faceted with different creation type
 - New: Add the capability of optimizing with conic const and curvature for Conic segment
 - New: Add new segment type: Conic
 - New: Add new function – “Create model & Run scheme & Raytrace” in the popup menu when right clicking on the after-scheme column.
 - New: Add new option –steps for Radial symmetry creation type
 - New: Add new segment method: Facet
 - New: Add new variable for Sphere segment: Radius
 - New: Add new after-scheme command: makeflyeye
 - New: Add new creation type - Revolving
 - New: Add new segment type - ellipse
 - Update: Fix the issue when zoom-in/out the editing window, the up point of the bitmap will mismatch where it drawn
 - Update: Fix the bugs when applying Fresnel/Facet method to sphere/ellipse/conic segment
 - Update: Fix the issue with splitting segments
 - Update: Fix the European decimal separator issue with exporting the model to TracePro
 - Update: Fix issue with exporting model if the top and bottom segment are sphere
 - Update: Fix the non-closed loop issue with generating elliptical segment in TracePro. Now using spline segment to create model
 - Update: Fix issues with getting wrong object name in after scheme
 - Update: Fix issues when loading and saving a file with new features
 - Update: Fix resizing bug
 - Update: Fix issue when updating the control point property of an ellipse/sphere

TracePro 7.0. new features/enhancements

(Released on September 30th 2010)

- Multi-threading
- Utilities menu with 7 Utility Programs including the Interactive Optimizer
- Removed Limitation of 35 Objects and 10 Sources (TracePro LC)
- Enabled Asymmetric BSDF models (TracePro Standard)
- New RepTile geometry (TracePro Expert)
 - Flattened Cone Geometry
 - Pointed Cone Geometry
- New Irradiance Map features
- System Tree enhancements

