Trackwork 2.20 Version Notes

- File format compatibility with Earthwork/Gradework releases

Version 2.18

- File format compatibility with Earthwork/Gradework releases

Version 2.15

- Improved method for displaying cut-fill colors with shaders enabled.

- Fixed reselection of Balance Region, after applying haul plan and then clearing selection.

- Restores previously selected reference, difference, and edit layer state from ESW file, if saved with this version of the software.

- Fixed Balance Area Picking.

- Allows entering more than two balance areas before "hauling" them. However, warns user to hide or delete more than the maximum before processing.

- Import File list includes .LLA files, as well as .TXT.

- Displays Cost Hours on Trackwork Analysis Dialog Bar, from start of track (or start of day) to position of slider, less ignore intervals.

- Tracks may be imported from either Track Analysis, or Track Plan Mode.

- Allows previous phases of haul plan (Haul-x.ESW produced through Stage Haul Plan) to become a new starting point if desired.

- Fixed display of time scale in Track Analysis Mode, after changing Time Difference.

- Outputs "Time Line" to KMZ file.

- Mouse wheel zoom now zooms from slider position, and does not change its time.

- Completed picking correlation between Haul List, and selected region on Plan View in Haul Plan Mode, using highlighted hatch patterns.

- KMZ: More precision for volume per cycle.

- Trackwork Analysis Mode: only hides tracks on planview display when check boxes unchecked; no longer hides tracks on bottom view.

- Presents tracks in Network Import Dialog in most recent first, under project.

- Temporarily moves unselected Balance Areas to Annotation Layer during Apply Haul Plan, so that any saved intermediate "haul file", can be used as a new starting point, once "Stage Haul Plan" clicked.

- Plan Sequence totals now have (cycle weighted) Load, Cycle Time, Cycle Length, Cycle Speed, and Minutes per Hour.

- KMZ: Image tiling enabled when "Optimize for Mobile" checked on KMZ File Export Options Dialog.

- Added "Send To Print Page" for Plan Sequence, Track Totals, and Track Vs. Plan.

- Haul Plan Dialog may be viewed in Track Analysis Mode (best viewed on second monitor). Either float dialog by undocking in Track Plan Mode, then choose Track Analysis Mode, or choose Window/ Haul Plan Dialog in Track Analysis Mode.

- Fixed deletion of selected sections from tracks which have breaks or work hours set.

- No longer adds break to track at beginning or ending, if work hours are extrapolated beyond beginning or ending of track, respectively.

- Fixed crash on cancelling Save Modified Dialog.

- Fixed crash in "Print Report" from Trackwork Guide, if Balance Region becomes unselected.

- Improved track load performance.

- Added ability to renaming track, and upload change to server.

- Added ability to clip track beginning and ending time, and upload change to server.

- Fixed time scale wheel zoom and timeline picking, when application is placed on the second screen of a multi-monitor setup.

- Added ability to press "Home" key, to reset Trackwork Analysis time line to extents.

- Added Vehicle Management Dialog, and ability to change vehicle to track relationship. Vehicles are updated immediately, vehicle to track may require uploading change to server, if more than temporary change.

- Fixed cursor blinking issues, for vehicle indication, on Trackwork Analysis View.

- Added ability to modify Haul List values for Haul Name, Load Volume, Cycle Time, Cycle Length, and Minutes per Hour, by double clicking on value.

- TrackCache directory is now C:\AGTEK\Data\TrackCache. Contents of any previous C:\AGTEK\Trackwork\TrackCache are moved to new location, and old directory is removed upon installation.

- Added ability to compare selected regions from Plan Sequence, with selected tracks from Track Totals, in Plan Vs. Track Mode.

- Updates color on Track List, when track color changed.

- KMZ: Outputs cut-fill labels for larger jobs without running out of memory.

- KMZ: Added ability to select color of cut-fill labels from KMZ Export Dialog to be either "classic" red/blue or black.

- Added following layers to Layer Selection Dialog: Profile Lines, Highway Data, and Pipe Lines.

- Fixed updating the correct entry after editing the Load entry of a reordered Plan Sequence.

- KMZ: Export filename no longer truncated for longer names.

- KMZ: Fixed crash exporting tracks only to KMZ file.

- Allows importing benchmarks from ESW file, even if it has no recover data.

- Fixed speedometer display, for multiple tracks, for which work hours set.

- Fixed combo box font size on toolbars when display font size set to "Medium", "Larger", and so forth, particularly when used with 4K monitors.

- Renamed "Track Totals" to "Track Record" to better reflect purpose.

- Added ability to choose "Selection" on "Plan Vs. Track" when any hauls chosen from "Plan Sequence", or any dates chosen from "Track Record", or both.

- Added ability to import/append Track Records from .xls file, from right mouse menu on Track Record grid.

- Editable fields on Plan Sequence, Track Record, and Plan Vs. Track grids are now drawn with blue text.

Version 2.14

- Synchronized ESW file changes.

Version 2.13

- "Maintain Image Scale" check box added to Align Matching Edges confirmation dialog. Default is true; will work as before by clearing.

- Added "KMZ Options" dialog for exporting KMZ file, saving need to pre-calculate volumes (Earthwork/Highway) or preselect resolution, and added AGTEK Access upload capability.

- Initializes display of AGTEK Access folders (for selection) faster, when uploading ADF or KMZ files.

- Fixed Image Import, when import file no longer exists on disk.

- Program begins in Haul Planning instead of Trackwork Analysis.

Version 2.12

- Fixed rare crash in PDF vectorize test.

- Importing multi-sheet PDF/TIFF results in being prompted for whether to "import the same sheet as previously opened." If "yes", puts image back to where it belongs in job.

- Added Get Password Dialog for PDF files that require a password to vectorize.

- Caches bitmaps produced from PDF files in user's temporary directory. Cache size and number of days bitmaps are kept is set on Main Menu under "Options".

- Set default "Plan View Resolution" to 1024, which may be lowered if necessary. This change does not affect current user settings, if overridden from 256.

- User may press "Insert" key when in Track Analysis Mode, or Track Plan Mode, to import a PDF/background image which had been previously imported.

- Importing multi-sheet PDF/TIFF without selecting image rectangle, prompts whether to "import the same sheet as previously opened." If "yes", puts image back where it belongs in job.

Version 2.11

- Fixed display of andpersand (&) characters, when they appear in reports.

- AGT file writer/reader now supports writing interpolated/daylighted point types.

- Renames reports internally, instead of deleting them when job saved with new name through "File SaveAs".

- Made Release Network Key dialog "system modal", to prevent it from being buried under other desktop applications.

- Strings/reports may now contain [and] characters.

- Internet Key system informs user upon application exit if there no longer is an internet connection.

- Allows Layer Selection Dialog to have dynamic layer additions, including all user defined surface layers.

- Added support for importing .png and .gif images as background.

- Fixed placement of cut-fill labels on planview image on Print Page, with shader display enabled, and "Default Cut-Fill Spacing" selected.

- Fixed printing of cut-fill labels over planview image, when "No Text Background" is chosen as Cut-Fill Label Style.

- Completed graphics compatibility for Windows 8.

- Added KMZ Export of Haul Plans.

- Added "Shader Support" menu option to Main Menu.

Version 2.10

- Fixed crash when enabling Shade Table displays.

- KMZ exporter suppresses cut/fill colors, if planview image not displayed.

- Reordered layers in KMZ exporter, so that existing annotation outputs before existing data lines, and design annotation outputs before design data lines.

- Fixed problem reading PDF images that are larger than "E" size.

- Interpolates background images to paper, while clipping at the view boundary.

- Added ability to print PDF/TIFF images to monochrome (Laser Jet) printers.

- PDF: Fixed partial redraw of background images, when using space-bar zoom.

- Fixed problem with drape line in reference surface, when shader display enabled, after applying haul.

- Changed all "Net Key" and "Network Key" references to "Internet Key".

- Fixed display of cut-fill labels after applying haul plan.

- Fixed inability to use F8 snap on transformation utilities.

- Fixed nomenclature on dialog to release "Internet Key".

- Uses knowledge of whether any cross section data exists in any alignments to calculate whether or not to insert points in trimesh for shader display.

- Fixed problem opening files with filenames of the sort XXXXXX.XXX.esw, or YYYYYY.YYY.pdf, etc.

- PDF: Align matching edges with "Image Only" will translate image on second alignment point at first alignment point, to bring remaining two alignment points closer together.

- PDF: When option to transform "Image Only", snap mode is initially turned off, otherwise it is initially turned on.

- KMZ Export no longer allows lines to be displayed in Google Earth which are hidden.

- PDF: Importing ESW file with PDF bounding rectangle (in Annotation Layer) now allows importing PDF file from it, once sent to Annotation Layer.

- No longer clears copy buffer, when pasting copied lines from one layer to another.

- No longer automatically alters "Snap State" when performing scaling/transform operations. User may use 'S' key to toggle snap state during scaling/transform operation, or use F8 key to enter a single snapped point.

- PDF: Lowered PDF preview resolution to enable reading larger multiple page PDF files.

- Import of ESW file uses surface name chosen by user for added surfaces.

- Fixed scaling problem reading metric AIP files.

- Fixed font size of Time Bar headings once sent from Print Page to printer, when paper size is large.

- PDF: Allows PDF/TIFF image to be selected from Annotation Line in Haul Planning Mode, so that subsequent Image Import will bring image back to original location.

- Fixed reporting of Average Idle Time on Statistic Area Dialog.

- Track Import improved to load tracks in order picked.

- Right mouse click once on Timeline shows time of click cursor on popup menu. Second right mouse click on a new location (not on the popup menu) displays time of cursor location and difference between it and first click. Left mouse click clears previous location.

- Improved resolution of PDF files specified on larger paper sizes. Also, default for "Use Image Reduction" is now false, unless changed on Main Menu.

Version 2.08

- Fixed Multiple page PDF/TIFF selection problem.

- Fixed region reversing problem when renaming "Haul" region and using "Stockpile" feature, when user performs Balance Area calculation before doing "Apply Haul".

- Gridmap transfers to Print Preview

- Netkey check during installation

- 'T' key rolls thru 4 options in plan view

- Cut-fill colors outside of work area (as defined by the Proposed Perimeter) will now always display as the "on-grade" color.

- Change KMZ export to use original LatLon data if possible

- Merge GradeModel Haul planning changes

Version 2.06

- Added StockPile functionality to Haul Planning.

- Create option to do partial hauls.

- Rearrange menus for consistency.

- Right click menu - Add "Snap".

- Benchmark layer turned on when adding BM's.

- In 3D-View, T-key toggles the 3D terrain on and off.

- Haul Guide runs current button on space bar or enter key.

- In planview, T-Key is a 3 way toggle in planview - 1. Planview (cut-fill colors) 2. Job with blue data lines and Image in background 3. Job with blue data lines.

- Shuffle Haul Plan Buttons.

- Add BM button to Haul Plan.

- Allow edit of BM's in Haul Plan and Haul Analysis

- Added image read and display (Use 'T' - toggle) to move between colorcoded-overlay-PDF

- Upgrades to Shaders. For computers using graphics cards supporting shaders this may be turned on in the registry by setting "No Shader Support" to 0

- Carries forward the fill factor entered by the user, on subsequent entry of Balance Regions.

- Allows user to choose to cancel haul plan staging, in addition to canceling saving of intermediate file before staging.

- Fixed problem displaying design lines, after applying haul to subgrade layer.

- Added a Guide for Haul Planning

- Added DENZ file import support. Format is Date-Time, Easting, Northing, Elevation.

- Carries forward the fill factor entered by the user, on subsequent entry of Balance Regions.

- Planview Mode now displays the length of the balance area segment being entered on the status bar.

- Enforces that the layers to be staged after applying a haul plan, are the same two layers that the haul plan was applied.

- Added 2D/3D toggle and ExportKMZ to TrackPlan toolbar.

- Default Opening view to TrackPlan.

- Allows user to override default Balance Area name, and it now sequences correctly using it.

- Balance areas may be used to define a stockpile, outside of either of the Proposed Perimeter, or the Existing Perimeter, as well as on site.

- Improved cut and fill region detection, used by Apply Haul Plan.

- Haul path color changed to purple in Google (kmz)

- Timeline size is remembered when switching between Analysis and planning.

- Changed haul Cycle Worksheet label

- Draw Haul Path option is enabled after user "continues" and edits the balance region

- Prioritized selection of BM over selection of design

- Files stored with tracks now show them in 3D when you go to that view.

- Changed the default to checked for the "Open KMZ after save" box when exporting .kmz files

- Removed the "Pen" after Utility>Balance Regions

- When exporting .kmz files the name showing up in Google Earth now matches the name of the .esw file while planning hauls

- Added ability to select a track

- Added new Pop-up menu for a selected track includes options available in both Time Line and Analysis Grid.

- Fixed remove all tracks bug .

- Added shortcut "V" key to show velocity during playback.\

- Added Haul plan template export to CSV.

- Added fix for ignore span

- Added Export report to CSV.

- Added button choices to menus

- Added Work hour choices to menu

- Added Toolbar button choices to menus.

- Added Registry setting for Ignore Color

- Network Key Support added.

- Fixes to combined totals for haul planning.

- Changed ignored sections so that the bottomview displays these sections grayed

- Removed combined balance areas totals

- Limited Track height in bottom view

- Fixed resolution of Emailed PDF

- Show combined totals for balance areas that get split

- Added ability to Clear All from the Print Preview

- Add Track labeling on the left side of the bottom view

- Allow user to set work hours on tracks.

Version 2.05

- Allow Staged Design in 3D mode.

- Added layers that are visible to export KMZ

- Re-ordered layers in export KMZ to match layer select.

- Moved Import browse button to top left

- Fixed machine position after picking then using the forward button

- Add symbols for Borehole & Stakelists exported to KMZ

- Changed File/Import/GRay to show tracks as the import progresses.

- Changed Installer. Existing users may need to deinstall Trackwork before installing.

- Program now uses default timezome from host computer

- Fixed bug with Home after importing data

- Changed default playback speed to 50

- Metric conversion fixes

- When saving a Track, the name of the track is the default name of the file

- When saving multiple tracks, they create one file for each track

- Remove, merge and delete Track options ask for confirmation

- Shader now creates an ongrade skirt when in staged design and in 3D view

- Fixed ability to re-read a GRay

- Added additional default track colors

- Added browse button to allow network access on Import/File tab.

- Removed Stage Design from Options menu.

- Disabled .kmz export from 2D-view mode.

- Copied Track Analysis data shows in Haul Template Dialog.

- Moved line space from after Av Idle Time to after Av Stop Time in Statistical Report

- Default for Google View in Import Dialog is off.

- Supports AGTEK Track Server if enabled.

- If you have multiple tracks and then save a track, the track detail will now update after selecting a different track.

- Shift-C and Shift-F are now working in TrackPlan.

- When entering a path, the length of the path is displayed in the bottom stat bar.

- The help description for the "P" button now appears when hovering over the button and also on the lower left gray bar.

- The menu and toolbar have been changed to reflect the Trackwork/HaulPlanning.

- The track list in Trackwork does not automatically scroll to the top when editing a track on the bottom of the list.

- The Show Track Stops display has been corrected to show stops greater than (and not equal) to the specified value.

- When hitting the refresh button in the Network tab, the tree status is restored (expanded, selected, and checked tree items are restored).

- Fixed T key to correctly toggle the terrain and not freeze the timeline. Note: N brings up the Analysis tab and U brings up the Haul Plan tab.

- Mapped network drives as well as a CD/DVD drive will appear in the Import File Dialog.

- Integrated Haul Planning functionality.

Version 1.33

- Focus now goes from bottom timebar to 3D view when mouse is moved out of timebar area.

- TimeZone is now correctly initialized.

- Progress is now shown on downloaded tracks (from any of the 3 tabs in the input dialog)

- Reference/Difference layer should be correctly selected based on the layers in the openned file.

- Stat area now reports average move speed .

- Timeline labels corrected on 1024x768 display.

- Removed hang when loading a file with no design.

- Eliminated crash when panning with no ESW file and then entering a cycle line.

- Overlapping time labels in bottom view are now prevented.

- On the print page, "Cut/Fill Font Size", "Cut/Fill Label Style" and "Guide" are now removed

- On the print page, Window menu is now correct

- Tracks are now shown on a single day, even if the track extends into a second day.

- Stat area dialog now shows both idle time and stops.

- Histogram now shows the correct number of cycles, and a Y axis.

- Using delete key in upper left track list now displays a "delete menu".

- Hide Dialog feature is now disabled in Trackwork

- Corrected the display of times when accounting for running on a different local time zone

- Added Cycle Stop Histogram feature

- Cycle Stops now are calculated based on only selected tracks.

- If no tracks are loaded, cycle count is 0.

- Calc Cycle stops button is enabled only if Hauling report mode is set.

- Eliminated a random crash which occurs when switching between the import tabs.

- Corrected the moving time calculation in a statiscal area.

- Now reads and writes the serial number in LLA log files

- Typical cycle stops is clamped when calculated to eliminate reporting >60 minute hours.

- Changed the precision of Av Move Time in the Transfer Mode report to show 1/10 seconds

- Linked with latest version of Gray library to force random serial number assignment of Gray.

- Display a prompt to set optimal values (rate and speed) in Gray if device is detected not to have them set.

- Fixed stops so they show up agin.

- Adjusted layer selection logic when file is opened in Trackwork. In this version the difference layer is turned off when file is opened.

- Made a change to the default views to handle registry suppressions.

- Install should now uninstall old version before installing new version.

- Idle time calculation was tweaked so that Grays with different speed settings should produce similar tracks.

- Eliminated second save dialog which appeared when you open a new job with a current modified job already open.

- When stops are turned on ,then point labels will be turned on. When stops are turned off, point labels will also be turned off.

- Displayed time for tracks in the Gray dialog has been corrrected. Previously the times for different tracks were all identical.

- Saved LLA track files from the Gray dialog will now have the serial number stored in them (in the header line).

- Decreased the size of the Import dialog.

- Stops are toggled on/off when the track is toggled on/off

- You can use the right click menu to select delete line to delete selected benchmarks

- You can edit a benchmark with the right click menu edit option

- The Stop button, Export KMZ, and 2D/3D toggle buttons have been repositioned in the toolbar

- In Transfer mode, the travel amount now displays in miles and the Typ cycle time is shown.

- Idle time calculation has been modified a bit

- Multiple points with the same time are now handled better (the closest point to the last endpoint is choosen)

- Statistic area calculations have been modified.

- Eliminate second error message when opening an ESW file with a missing log file.

- Installing between Trackwork versions is improved.

- A new Time Class has been utilitized in reading LLA files and with time stamps.

- Moved file and track names to the top of the email message when emailing an ESZ file.

- Adjusted the filtering of the idle time to better handle irregularly spaced points and points spaced more than 1 second apart.

- Time stamps can be shown with the track points

- Stops in the tracks can be displayed using the stop icon in the toolbar.

- The user can specify the minimum duration for a displayed stop by entering the value in the dialog which appears after the icon is selected.

- Stops can be toggled off by selecting the stop icon a second time.

- Stops are displayed in 3D view and also exported in the KMZ file.

- Benchmarks can now be selected and deleted.

- When entering a Benchmark, the default elevation is now set to 0.

- When installing Aladdin drivers, the install dialog will move to the upper right corner, so that the Aladdin window will be visible.

- In the Add/Remove dialog, AGTEK Trackwork will be shown (not Trackwork).

Version 1.23

- Corrected problem with saving ESZ files and tracks (track were being added to ESZ without .txt extensions)

- Corrected several hInstall.exe problems when installing on Vista.

- Fixed shader problem on Nvidia GeForce 7300GT card

- Changed registry COM port reading logic to handle Sprint Card ports.

- Added a cycle display option to the bottom time line. When turned on, an alternating gray background appears behind the track in the time line to help distinguish the cycles. The cycle display option is turned on by right clicking on the time line and selecting the option in the pop up menu.

- Fixed a KMZ export problem with using an ampersand in the name and/or description of the Job file and track names. Now no parsing errors will be reported by Google Earth when the KMZ file is opened and read.

- Analysis report has been changed to allow a user to enter Typical Cycle Stops (in seconds or minutes). This value is used to adjust the average move time and compute a typical cycle time.

- Statistic area has been changed to display an average stop time.

- Selecting "V" while in print page, no longer crashes. The behavior is defined is to switch back to Trackwork view.

- Cut/Fill colors no longer go away when toggling from 2D to 3D

- Right-click menu's continue option is now working.

- When sending an email, the message body now a list of filenames contained in the attached ESZ file.

- A new icon for Import is now in the Trackwork toolbar.

- In the import file list, the ctrl and shift keys now work to allow selecting a range of files.

- In the import file list, double clicking on a file now directly opens that file.

- GRay import recognizes Track Breaks (created by pressing Track button when capturing data points)

- Merging of Track Files now works more reliably.

- Right clicking in track list now shows menu items to allow for the deletion and saving of selected files and sections.

- File/New/Job Information dialog now has a default "Untitled" job name. Save is disabled until the user changes the file name.

- Fixed some problems with the slider position when the mouse wheel was used to scale the time.

- The Import dialog now remembers the last tab (File/GRay/Network) accessed.

- The program no longer crashes when tracks are sent to the print page with a job file being opened.

- Range edit box should now not change during playback.

- Continue is now disabled in popup menu, unless there is an editing operation.

- PDF files now are generated at a higher resolution. After being saved to a disk file, they will print (e.g. using Adobe Acrobat) at the correct size.

- The Track Import functions are now accessible through a single tabbed import dialog (accessible by the far left yellow toolbar icon).

- An icon for exporting KMZ files was also added to the tool bar.

- An "Open KMZ file after save" option was added to the Export KMZ dialog.

- Benchmarks created when adding a track file to a un-benchmarked file, were incorrectly aligned to the ESW file. This is now fixed.

- Selecting File/Save-As .esz will now not change the file extension to .dxf.

- AGTEK is now capitalized in the File/Save As filter list (for AGTEK Sitework Zip files).

- Clipping of tracks is now properly working when creating a PDF file.

- The range is not lost when attempting to change it when playing back a track.

- The total number of points is now correctly shown in the GRay dialog, if the number of points happens to be larger than 100,000.

- The name of the saved GRay file now correctly matches the Month/Day of the selected track.

- The correct track section is now printed when an individual section is currently selected in the dialog bar track list.

- As a conveinence, Google Earth Lat/Lon formatted text can be copied and pasted into the any of the Lat/Lon fields in the Benchmark dialog.

- When stopping playback, the current time is not moved to the end of the track. It remains at the current time.

- When playing back and the current time runs beyond the end of the time slider, the time slider is now properly adjusted to continue to show the current time.

- Coverage area is now properly recalculated when different tracks are selected, or when the current time is changed.

- Deleting tracks is now logged as a transaction in the ESW which will be "played back" for when the esw is reopened.

- Track line width is now larger in plan view printing.

- If a track is being ignored, it is not shown in the report sent to the print page.

- Tracklines are now clipped properly when the plan view is drawn.

- Multiple scaled plan views are now correctly sized when sent to print preview.

- When breaks are added to the beginning of a track, there are now no sections created with 0 time.

- Accelerator keys in the Layout menu (e.g. delete, up/down, left/right, prior/next) are again working.

- The Frame and titleblock now appear correctly in the generated PDF file.

- "Finish" is removed from the right click menu.

- Corrected install problem with PDF reader library

- Now when sending reports to print preview, the view doesn't change to Print Preview. The user is left in the Trackwork Analysis view.

- 2D Panning performance greatly improved, if shaders are being used.

- Added Email PDF and Export PDF options to Trackwork Layout view.

- Improved the handling of missing Trackwork files when opening ESZ file.

- If the track is hidden, the puck will not be drawn.

Version 1.15

- Zip file support added. A new file extension (.esz) has been added so that these files can be saved and opened. Also the email option will create an esz file comprising the esw and any referenced track files, and then attach the esz file to the email. Note: The esz file is essentially a zip file (you can rename the .esz extension to .zip and open with any appropriate zip reader program). Also upon installing trackwork, the .esz file extension will be associated with Trackwork. This implies that all .esz files will have a Trackwork icon, and opening the .esz file will launch Trackwork.

- Added Vehicle Arrow Rate selection to the Edit Menu.

- Highlighting of tracks is now consistent when changing a track color, going to print preview dialog, and inserting a break.

- Av Load and Volume values are now consistent when the cycle line is deleted.

- Page Up and Page Down keys will do a time scale if the cursor is in the bottom view when the keys are entered. The time scale will be relative to the current time (as indicated on the time slider). Note that the up/down arrows work the same as the page up page down keys in the bottom view.

- All edit fields can be easily filled in when running on XP Tablet and using the popup Tablet Input Panel window.

- Progress is now shown when reading in LLA files (either when they are explicitly opened, or when referenced by an ESW file).

- A better status message is given when the G-Rays data collector is erased.

- Email menu item added to File menu. Installed client email program (e.g. Outlook Express) will be launched with new email ready to be sent. This new email will be generated with

current ESW file and any loaded tracks included as attachments. The body of the email includes basic ESW file and benchmark information. Subject line is set to "Agtek Trackwork Files". To and CC lines are left blank.

- A "Remove All Tracks" right click menu item is added when right-clicking on the list of tracks.

- ESW files can now be saved with complete track history information (breaks and colors too), current displayed time, and time range. This track history is recorded in the ESW file and played back when the ESW is opened. The track history is removed when the "Remove All Tracks" option is selected.

- Imported GRay tracks are now automatically saved as a LLA file in a TRACKCACHE directory , if they have not been explictly saved as a file by the user (this is necessitated by the need to record and playback track history information). The TRACKCACHE directory is located under the Trackwork program directory (e.g. C:\Agtek\Trackwork\TRACKCACHE)

- Trackwork Dialog state is also now saved (e.g. Haul/Grade/Transfer setting)

- When on the Print Preview Page, entering a "E" key will toggle back to the Trackwork page (instead of crashing!)

- Selected Tracks in the grid control will remain selected, even when the input focus moves away from the track grid.

- Selection of tracks in the grid control has been improved. Also, you can now select a range of tracks corrrectly using the alt key, and individual tracks using the ctrl key

- Expanding and Collapsing of tracks in the grid control is also improved.

- Support for >24 hours time added. This major code changes greatly improves the support of reading and manipulating tracks straddling GMT times, and allows for tracks created on multiple days to be properly viewed.

- Added support for Daylight savings time.

- Breaks can now be added at the beginning and end of tracks using right-button menu.

- Corrected the drawing of the track idle time.

- G-Ray USB drivers are copied to Trackwork directory (but not installed).

- Scroll position in Time Bar is repositioned during playback so that it doesn't stay stuck on right side.

- Jeep is now drawn without Cut/Fill skirt display.

- Cut/Fill labels will not show up when planview is sent to layout view.

- 3D Position of track is now drawn with a column and halo.

- Timebar is now sent to print page along with 2d/3d view of tracks. In supporting this, the labels and colored track lines in the timebar were made larger.

- 3D Buttons in dialog bar are now more responsive.

- Left/Right Arrow keys now adjust the timebar and also cause the view to be updated.

- Dragging the timebar is now stopped when the cursor is below the bottom timebar view.

- Trackwork Sample Data is now installed to the C:\Agtek\Data directory

- Updated G-Ray Reader.

- An asterik (*) is shown on the right click menu when entering breaks, to indicate that the break will be made at the beginning or end of a moving section.

- The maximum Time Scale level is now set so that it bounds the tracks, rather than set for a 12am - 12pm time period.

- Multiple open of track files is now working. (press CTRL while picking for multiple files)

- Time bar tweaked to display without overlapping on 1024x768 monitor

- Average Speed is now coming up at FPS (not MPH) when using Stat Area

- Analysis Area is now enabled regardless of if tracks are loaded.

- Crosshair should not stay as a hourglass if recalculating due to a zoom or pan.

- Playback speed is now not affected when changing the time scale.

- Terrain and planview lines are now properly showned when switching between 2D/3D views.

- If the playback is paused, now either the play or pause button can be used to resume playback.

- Print report now sends report in Haul mode without errors.

- When returning from the print preview tab, settings in the Analysis Dialog should be preserved.

- Time slider is now moved to end of day when volume or average load is entered.

- Time scaling feature added to bottom timebar. Using the mouse wheel or page up/page down keys will allow a user to change the scale of time shown (from a maximum of 1 day to a minimum of 2 minutes). The displayed track signature under the time bar as well as the time scroll bar, and playback speed all change accordingly. Time bar can also be dragged by holding down left or middle mouse button.

- Example files now installed to Agtek\Data directory

- Velocity in Statistic Area report dialog is now reported in feet-per-sec for haul and grade mode, and miles-per-hour for transfer mode.

- Status bar cut/fill volume grid-based calculation is modified to eliminate an "area-compensation". Also units label is now corrrectly labeled as "CY" instead of previous incorrect "CF".

- Blinking cursor which show's current track position is now changed to a more visible blinking "puck".

- Blinking cursor is now shown in correct color.

- Blinking cursor is now removed when the corresponding track line is not shown.

- Track duration is now shown in the Import G-Ray dialog's track table.

- "Erase" button renamed to "Erase all" in the Import G-Ray dialog.