ProVAL 3.61 Release Notes

Installation

- Microsoft .NET 4.5.2 is required.
- Windows 7 SP 1 is the minimum supported operating system.
- ProVAL 3.6x can be installed on the same machine as 3.5x or earlier. Previous versions of 3.6x will be replaced.

3.61.54

Editor

- Fix: Corrected validation of section locations. Note that full validation is not yet provided when directly editing coordinates.

3.61.53

File Import

- Change: Dynatest RSP files that used a location unit of stations or miles.feet could not be imported.
- Change: Sections with invalid locations will not be imported.

Editor

- Change: Additional validation was added to Sections to prevent invalid locations. This validation does not yet apply when editing a section's coordinates.

Analysis – Automated Faulting

- Fix: Sometimes the view could not be changed from the results to the inputs.

Analysis - Optimal WIM Locator

- Fix: Changes to the grinding locations table will now update the chart automatically.

Analysis - Smoothness Assurance

- Fix: Changes to the grinding locations table will now update the chart automatically.
- Fix: The 250mm filter in the selection table sometimes showed as selected even if it wasn't.

Miscellaneous

- Fix: Stability improvements.
- Fix: Template filter settings did not display correctly when only the 250mm filter was allowed for an analysis.
- Fix: Some regional settings in Windows prevented the saving of some files, including projects.

3.61.50

Editor

- Change: The web provider ProVAL uses to create routes changed their service without notifying us. Changes were made to use the new service.
- Fix: Changes made to the Location Information did not update section routes.
- Fix: Reversing a profile did not update all data.

3.61.49

File Import

- Change: Updated Ames importers. Profiles will likely not be exactly the same and some additional information is now available in the Editor – Info.

Editor

- Fix: Sometimes the chart would show profiles from the previously opened project.
- Fix: Section export results were inconsistent for some scenarios. New behavior: an existing route will be exactly preserved, the distance offset will always be the same as the section start, and lead-in and lead-out will be set to 0.

Analysis - Smoothness Assurance

- Fix: The RN percent out of spec actually showed the percent in spec.
- Fix: Results were sometimes shown with the wrong unit system.
- Fix: Various map issues and KML/KMZ exports.

Reports

- Change: File names for reports for new projects will use "Untitled" for the project name instead of a blank.
- Fix: Many issues fixed for the SAM reports.

3.61.44

File Import

- Fix: Crash when importing a file that was locked by another software. Such as when a CSV file is opened by Excel.

Editor

- Fix: Setting the start or stop coordinate of a section when a distance offset was present sometimes resulted in the coordinate being offset by that distance.

Analysis - Smoothness Assurance

- Fix: The RN percent out of spec actually showed the percent in spec.

3.61.42

File Import

- Change: Updated Ames importers.

3.61.39

File Import

- Fix: Event markers that are located before the beginning of the profile will not be imported.

Analysis - Smoothness Assurance

- Fix: Head height for grinding locations was incorrect when using Metric units.
- Fix: Map tooltip for fixed-interval segments showed the same values for all segments.
- Fix: The lengths reported by the histogram were incorrect.

Misc

- Fix: Copying tables sometimes crashed.

3.61.36

File Import

- Fix: Event markers that are located beyond the end of the profile will not be imported.
- Change: Updated Ames importers to accomodate changes in newer Ames systems.

3.61.34

Editor

- Fix: Exporting sections to files could cause the exported files to not be usable. A fix is also included to allow ProVAL to be able to open affected files and projects.

3.61.33

File Import

- Change: Updated Ames importers to accomodate changes in newer Ames systems.

3.61.32

File Import

- Fix: Texas PRO files with a letter suffix in the beginning reference marker could not be imported.

Editor

- Fix: Crash if the lead-in and lead-out caused all of the profile to be removed.
- Fix: Changes to the file caused the Report button to be enabled, leading to a crash if pressed.

Analysis - Profiler Certification

- Fix: The detailed section for the PDF report was not shown for the left profiles.

Report

- Fix: Crash if no "Open File" was pressed but no files were selected.

3.61.30

Analysis - Smoothness Assurance

- Fix: The fixed-interval analysis for HRI was returning results for the MRI analysis.

Misc

- Fix: Workshops were not being shown on the start page.

3.61.29

File Import

- Fix: Changes in the previous version caused some files to not import incorrectly when using non-English-style Regional Settings.
- Change: Improved event marker import for Dynatest.

- Change: Verify that the sample interval in Dynatest files does not change direction. It should either be always positive or always negative. Files that do not meet this requirement will not be imported.

3.61.27

File Import

- Fix: Files that started with a blank line could not be opened.
- Fix: ProVAL 2.x projects could not be opened.

Editor

- Fix: Applying the route for a file with a large number of events could take a long time.
- Fix: Leaving the editor before applying a route finished would cause a crash.
- Fix: Reversing did not work well when using mileposts.
- Fix: Changing the direction when using mileposts did not immediately update charts.
- Change: Distance offset is now allowed to range from -9,999,999 to 9,999,999 feet (or -3,048,000 to 3,048,000 meters). Please note there is a practical limit of 7 digits. Anything more will be lost.
- New: Added ability to clear routes.

Analysis - Smoothness Assurance

- Fix: A grinding location with no decimal places showed an error.
- Fix: Grinding would fail if any locations had a start location after the stop location.
- Fix: Changing the locations might not update the length.

Analysis - Optimal WIM Locator

- Fix: A grinding location with no decimal places showed an error.
- Fix: Grinding would fail if any locations had a start location after the stop location.
- Fix: Changing the locations might not update the length.

Misc

- Fix: Some Windows Regional Settings would cause a crash at startup.
- Fix: The map legend font was sometimes blurry.
- Fix: PPF files with invalid route information would cause a crash. That has been fixed and ProVAL will also attempt to create a valid route.
- Fix: Possible fix for rare crash when changing options.

3.61.24

Installation

- Fix: Possible fix for the installation running a repair when opening a file associated with ProVAL. For example, double-clicking a PVP file.

Editor

- Fix: Various issues with custom properties and how they show in the history.

Analysis - Ride Quality

- Fix: The threshold for non-RN, fixed-interval charts might move when resizing the software.

Miscellaneous

- Fix: Possible fix for rare crash when showing event markers.
- Fix: Maps were no longer showing.
- Change: The precision for m/km was changed to 3 decimals.

3.61.21

Installation

- Change: The installation is now digitally signed and distributed as an MSI file instead of an EXE. This decreases the risk of antivirus software detecting a false-positive with the installation.
- Change: Microsoft.NET 4.5.2 is no longer installed if it is not present on the computer. The ProVAL installation will not progress unless .NET is installed.

Editor - Sections

- Fix: Number entry and formatting was inconsistent. New approach should fix it. If this works well, then we will gradually roll out this change to the rest of the software.

Analysis - Profilograph

- Fix: Previous version caused only the basis selection results to be reported in the table.

Miscellaneous

- Fix: Sometimes the Report button in the toolbar was disabled.

3.61.20

Miscellaneous

- Change: Accessibility improvements.
- Change: The installation is now digitally signed.

File Import

- Fix: Importing text files failed if any of the columns were identified as latitude or longitude.

Analysis

- Fix: Inconsistent filter units when adding a file to a project using SI units.
- Fix: Greatly improved speed of drawing results on the map.

Analysis - Optimal WIM Locator

- Fix: Crash when applying the default template.

Analysis - Profilograph

- Fix: Software may crash if some of the areas could not be analyzed.

Analysis - Ride Quality

- Fix: Sometimes the software did not export the results to KML or KMZ.

Analysis - Smoothness Assurance

- Fix: If multiple profiles were selected in a project created before ProVAL 3.60, the project would fail to open.

3.61.17

File Import

- Fix: Ames provided a correction to fix a problem where event locations from ARD files were sometimes offset. You will need to re-import the ARD files to get the corrected events. PPF files from Ames do not need to be re-imported.

Charts

- Fix: Printing fixed-interval or histogram charts caused the software to crash.

Editor

- Fix: Saving filtered profiles no longer prints a crop message in the history. Profiles were not actually cropped because filtering does not affect the profile length.
- Fixed: When pasting sections, the stop points could extend past the length of the profile if the source was a shorter profile.

Analysis - Profilograph

- Fix: Charts used the wrong elevation unit if centimeters was selected. Tables were unaffected.

Analysis - Smoothness Assurance

- Fix: Lengths for histogram bins did not account for leave-outs. Percentages were correct.

3.61.14

Editor

- Fixed: Occasional crash when switching to the Editor screen.
- Fixed: The history for files that were filtered and then saved did not record the filtering.

3.61.13

Maps

- Fixed: MapQuest unexpectedly stopped providing one of the map services we use. We have changed the available maps to Bing Maps Road and Bing Maps Aerial. The default map is now Bing Maps Road.

Editor

- Fixed: Sometimes the start point for a route was empty even though it was in the original profile data.
- Fixed: Occasional crash when switching to the Editor with the Events screen active.

Analysis – Ride Quality

- Fixed: The fixed-interval tabular results for "HRI and IRI" and "MRI and IRI" always showed the results from the first selected file.

3.61.11

Editor

- Fixed: Changing the sample interval did not update the lengths shown.

Viewer

- Fixed: PDF reports could not be created for files with events.

- Change: At least one profile must be selected to create a report.

Analysis – Rolling Straightedge

- Fixed: PDF report could not be created.

3.61.10

Editor

- Improved route creation for cropped files.

Analysis

- Templates saved in a unit system other than the active one were not applied correctly.

Analysis – Smoothness Assurance

- Grinding screen sometimes did not show any locations.
- PDF report showed a non-existent profile when using IRI with a single-channel file.
- Long continuous PDF report was missing some units.
- Software could crash when using IRI with a single-channel file.
- Total Ground and head height were not converted correctly when changing the unit system.
- Any change to a grinding location might change the start and stop locations.
- Better handling of decimal places for grinding locations.
- Results were not converted when changing the unit system.
- Grinding chart might show the wrong elevation unit.
- Profiles in the grinding screen always used the comparison filter even if no comparison was selected.

Analysis – Optimal WIM Locator

- Total Ground and head height were not converted correctly when changing the unit system.
- Any change to a grinding location might change the start and stop locations.
- Better handling of decimal places for grinding locations.
- Lower threshold was being ignored.

Miscellaneous

- Migrating from ProVAL 2.7 to 3.6x might leave no analyses selected in the Options.

3.61.4

Viewer

- Software would crash when dragging a file onto the chart.
- Chart legend did not update when renaming a file or profile.

Editor

- Events and Sections are now automatically sorted by their start distance.
- Changing the lead-in or lead-out did not update the length.

Reporting

- Changing the folder for reports did not update the folder shown on the screen.

Analysis

- Checkboxes with profile names sometimes showed the incorrect name.
- The sample interval shown in the profile selector is now limited to two decimal places.

Analysis – Automated Faulting

- To better follow the requirements of AASHTO R36 Section 5, the sample interval is now required to be no more than 38 mm (1.5 in.). Due to this limitation, the sample interval is now displayed in the profile selector for easy reference.
- The x-axis for joint spacing charts was not formatted according to the computer's regional settings.

Analysis – Profile Certification

- Software would crash when changing an input.

Analysis – Ride Quality

- Analysis results were not mapped correctly when the selected file used a distance offset.
- For the overall analysis, the first point was being marked as a leave-out. The effect was unlikely to be noticed when using real-world profiles.
- Improved the labels for the chart legends and table columns for "HRI and IRI" and "MRI and IRI".
- Tables did not load correctly when a file or profile had a "." in the name.

Analysis – Smoothness Assurance

- Grinding locations and analysis results were not mapped correctly when the selected file used a distance offset.
- Text and Excel reports for the comparison and before/after grinding profiles are now created.
- Text reports that used different files for before and after grinding results have been merged.
- After grinding results for the comparison charts were labeled as before grinding results.
- The fixed-interval legend was missing the after grinding entry.
- Fixed an issue where the SAM results screens didn't remember their settings when changing to another area of the software and then back to SAM.

3.60.0012

Analysis

- A list of all files created by the report is provided. Files can be opened from here or the folder where they were created can be opened.
- Import and export of analysis templates was moved from the options to a new button in the title toolbar. Individual templates are also now listed.
- When exporting analysis templates, built-in templates are no longer included.
- Added help text for the template commands (Apply, Edit, Save, Delete).

Analysis – Profilograph

- The profilograph response was being exported for the text summary report.

Analysis – Ride Quality

- For the continuous analysis, one-half of the base length both before and after a leave-out is now excluded.

Analysis – Smoothness Assurance

- For the continuous analysis, one-half of the base length both before and after a leave-out is now excluded.
- The IRI analysis was changed to only accept files with both a left and right profile, or a file with only one profile. This not only allows analysis of both profiles at the same time, but the grinding locations will be based on both the left and right profiles.

- "No Grinding" was changed back to "Before Grinding".
- The PDF report was re-organized.
- Added legend for the grinding chart.
- The autogrinding is automatically performed and has been removed from the toolbar.

Misc.

- Some of the toolbar buttons have been moved to toolbar in the window title.
- Files can be exported as PPF files or to a new ProVAL project.
- Excel and text reports no longer include data where leave-outs are present. To better handle this, the Ride Quality and SAM will produce Excel and text files for each file/profile.
- Saved projects with the 250mm filter checked for analyses may be shown as unchecked.

Editor

- An effective length has been added that removes leave-outs.
- Selected sections can be exported to PPF files, exported as files in a new project, or copied to the sections clipboard. Sections on the clipboard can be copied to other files in the same project. This prevents the need to define the same sections multiple times.
- The project is now automatically saved when a file is removed.
- Coordinates in a file created by exporting a section or cropping could be incorrect.
- Files with the same start and stop coordinates could not be opened.
- Sections table changed to show fewer decimal places.

Known Issues

- Viewing files with a large number of event markers may cause the software to slow down or crash. A temporary workaround is to uncheck "Show Events" in the toolbar.
- Screens may not display correctly on Windows 8 or 10 when scaling of more than 100% is used.
- Because SAM now operates on files instead of profiles, projects that contain selected files with more than profile cannot be analyzed in ProVAL 3.5x and earlier.
- Some Ames LDF files cannot be imported.
- Automated faulting does not work well with mileposts.