# ProVAL 3.5 Release Notes

# **Upgrading**

ProVAL 3.5 can be installed on the same machine as 3.4 or earlier. Previous versions of 3.5 will be replaced.

#### 3.52.0371

#### Analysis – Smoothness Assurance

- The RN analysis would fail if the selected profile had a mapped route.
- The short threshold was being shown on the long continuous chart for RN.
- Leave-outs were not being excluded from the fixed-interval chart for RN.
- The pre-grinding comparisons for HRI were corrected to analyze the left and right profiles separately.
- The grinding simulation for HRI was corrected to analyze the left and right profiles separately. The default grinding locations were correct, however.
- The post-grinding analysis and comparisons for HRI were corrected.

# 3.52.0368

# File Import

- Updated code for Ames files.
- Files were taking a long time to add or open.
- Profiles in text files marked as "Unknown Location" were not being imported.

#### **Editor**

- The sample interval will now display up to 7 decimal digits.
- Saving new profiles from a section export or filtering modified the GPS coordinates incorrectly.
- The editor might have shown an offset that was different from what is actually used.
- Added a feature to reverse profiles.
- Changing an event marker could be very slow.
- Changing the stop longitude for a section was not possible in the table.
- Changes made to the sensor location assigned to a profile were not always saved.

# Analysis - PSD

- Zooming did not work correctly after changing the displayed chart type.
- The analysis can be now be run for profiles with up to 10 million points.

# Analysis – Smoothness Assurance

- For the histograms, the distance out of spec has been added.
- In the KML export, the wrong file was sometimes used for the events.
- Fixed rare issue with reverse grinding for certain grinder settings.

# Map

• Exported images of the map were missing the copyright text and the map legend background was transparent.

# Miscellaneous

- Importing a ProVAL 2 project and saving it to a new ProVAL 3 project may yield an unusable ProVAL 3 project.
- The installation might not install the Microsoft .NET Framework if it was missing.
- Stability improvements.

#### 3.51.0358

# Editor

The length shown for a section might not match the unit.

# Miscellaneous

- Stability improvements.
- Opening the toolbar item for units could cause the software to refresh the units.

# 3.51.0355

# File Import

- Updated code for Ames files. If you have previously imported Ames ADF files into 3.5, you will
  need to remove those files and re-import the data. This only applies to ADF files. ARD and LDF
  files are unaffected.
- Corrected several issues with the wizard for text files.

### Editor

- Route creation and acceptance could fail if the regional settings for the computer were not English (United States).
- Editor screens could be disabled when opening a project.
- Sections were sometimes not drawn on the chart.

# Viewer

- The thumbnails were not always correct. Existing thumbnails will not be corrected by this version.
- KML and KMZ exports showed the start and stop of the entire file, rather than the selected section.

#### Miscellaneous

- Software might crash if zooming to the maximum.
- Showing event markers might cause the software to crash.
- Obscure Windows issue could cause the software to crash when closing a project.

# 3.51.0350

# File Import

Updated code for Ames files. If you have previously imported Ames ADF files into 3.5, you will
need to remove those files and re-import the data. This only applies to ADF files. ARD and LDF
files are unaffected.

#### Editor

- Not all profiles were available for each of the sensor locations.
- Changing the sensor location could cause a crash.

# 3.51.0346

# File Import

• Updated code for Ames files.

# Editor

- A window is now shown when creating the route.
- A change by MapQuest in May broke the ability to create a route.

### Miscellaneous

- Change to prevent the third-party chart from crashing the software.
- Cosmetic change to file history.

# Reports

• The Viewer PDF report did not work for some files.

#### Viewer

Changing the section for a file did not update the map.

# 3.51.0344

#### Editor

- Route preview map was not showing.
- Setting the file's stop location on the map did not show the stop flag image on the map.
- Setting a route that has event coordinates may cause a crash.
- Added ability to scroll the route area.

# 3.51.0339

#### Installation

• Changes by a 3<sup>rd</sup> party caused some files to not be updated when replacing an older version, causing the PDF report generation to fail.

# Editor

- Disabled some toolbar items when no file was currently selected.
- Corrected an optimization from two versions ago could cause a crash.

# 3.51.0335

# File Import

- Events for Dynatest RSP files are handled differently now. Changes in the photo sensor state (ON/OFF) are now marked as events only. Also corrected a bug that could have removed the last event marker.
- Import of Ames ARD files is significantly different now. The data is now imported unfiltered.
- After much discussion with Ames, it was discovered the data being imported from the ARD file did not match the sample interval imported by ProVAL. ARD files imported with previous versions of ProVAL 3.5 should be imported into this version.
- ARD events from the photo trigger are now marked as such, instead of just as "Event".

#### Editor

• The leave-out sections were not always drawn on the chart in the Basic screen.

# Analysis - PSD

• Corrected the unit text for the slope chart's y-axis.

#### 3.50.0332

# File Import

- File Import Wizard did not work.
- Updated code for Ames files.

#### Viewer

• Some files might not have an image thumbnail.

# Analysis - Smoothness Assurance

• Renamed some of the text and Excel reports.

# 3.50.0329

# File Import

• Projects could not be saved if the imported PPF files did not include expected information.

#### Miscellaneous

- Some analysis tables did not load results on subsequent runs.
- In rare circumstances, the software could crash when hovering the mouse over event markers in the chart.

# Continuous Ride Quality

 The chart for continuous ride quality did not subtract half the segment length at the end of the profile when "Use 250mm filter" was unchecked. This did not affect results, only the chart display.

# **New Features and Changes**

# Maps

- Maps have been added to the Editor, Viewer, Ride Quality, and Smoothness Assurance.
- Coordinates can be set for Sections.
- Given a start and stop coordinate, the profile will be mapped to a road when possible.
- Ride Quality and Smoothness Assurance results will be shown on maps when possible.
- Maps can be exported to images, KML, or KMZ.
- The previous "Show on Map" feature has been removed.

# Reports

- Bookmarks were added to PDF reports for easy navigation.
- Improved PDF creation speed.
- Project name has been prepended to report file names.

#### Miscellaneous

- Added Release Notes to installation. They are accessible via the Help toolbar item.
- Simplified installation.
- Added support for new Ames ARD files.
- GPS information from Ames, Dynatest, and Texas files is now imported.

- Improved speed of some charts.
- Added support for detecting leave-outs in Texas files with only one profile.
- Files with the same name can be added to a project. For example, Test1.erd and Test1.rsp can now both be added to the same project. Files with the same name will automatically be renamed to prevent a conflict.

# **Issues Addressed**

# Profilograph

• Segment locations were sometimes incorrect when using mileposts or when switching units.

# **Profiler Certification**

- Individual comparison numbers appeared to not match the Statistics table. This was caused by rounding the comparisons to 0 decimals. Comparison values are now shown to two decimals and the remaining decimals are cut off, rather than rounded.
- Changes in the editor cleared the analysis but did not reset the view back to Inputs.

# Ride Quality

• Using "Select All" in the toolbar could lead to duplicate results.

#### Miscellaneous

- Selecting more than 15 items for some charts could cause the software to crash.
- Changes to events were not immediately reflected in charts.
- Long Cutoff Wavelength for filtering did not allow values greater 999.99. Limit is raised to 9999.99.
- Changes to the Texas file format to include GPS data could cause the leave-outs to be imported incorrectly.

#### Editor

• Zoom would sometimes stop working correctly.

# **Known Issues**

- Map image tiles may occasionally be missing.
- Excel and text reports still show data where leave-outs are present.
- Viewer KML and KMZ exports always show the full section for a file, instead of the selected section.
- Older versions of ProVAL do not recognize some of the settings from newer versions and the settings may be lost. For example, loading a 3.5 project into 3.4 and saving it will cause the maps settings in the project to be lost.
- 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.
- Changing the coordinates for sections or event markers may take a long time.
- The two most zoomed-in levels for the Bing Aerial map do not show.
- ProVAL will only look correct with the default text size on Windows 8 and 10. Higher values will not work.